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SAFETY NEWS

OCTOBER 1963



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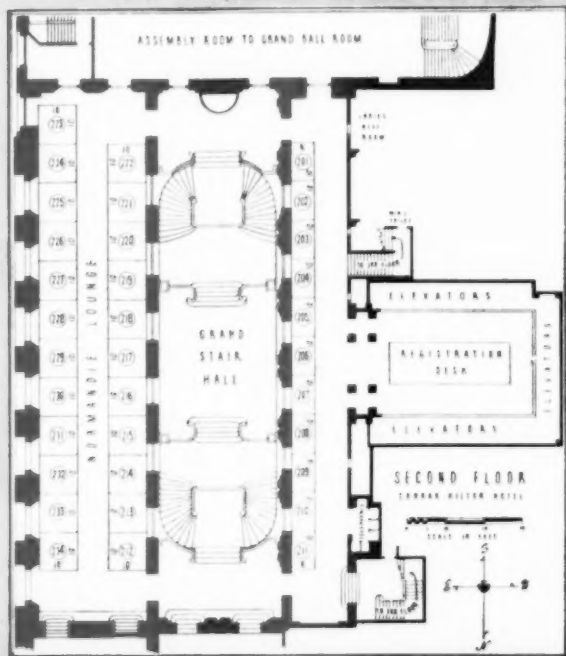
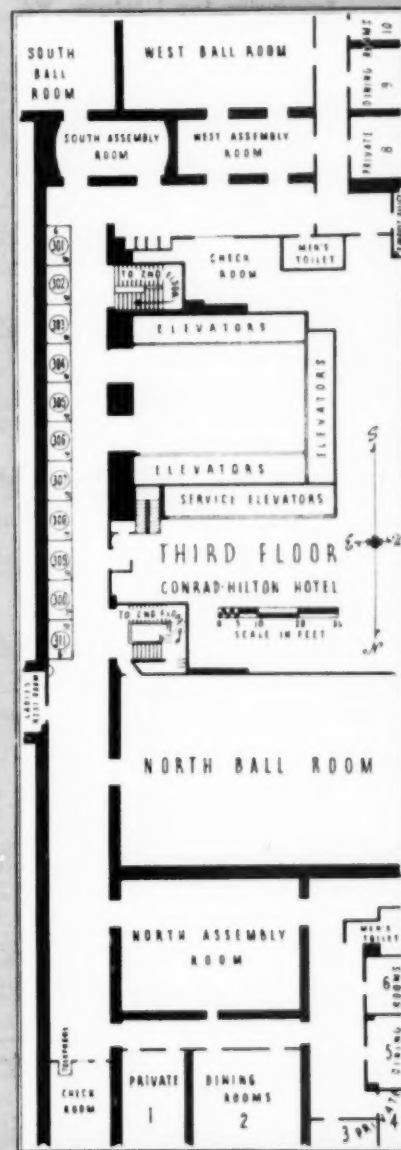
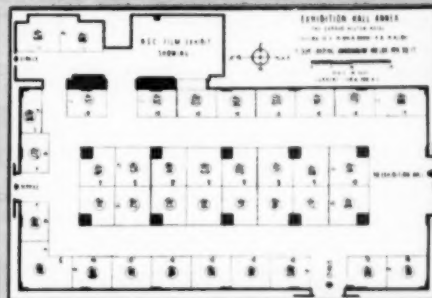
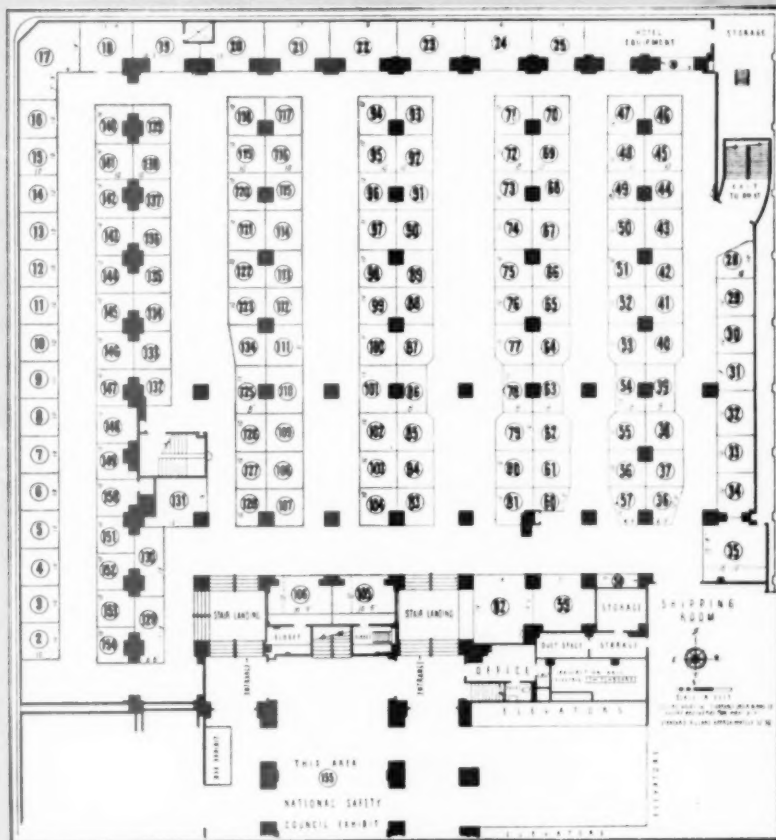
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NATIONAL SAFETY CONGRESS and EXPOSITION

Official Exposition Guide

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**OCTOBER
19-23
1953**

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AETNA CASUALTY & SURETY CO. 151 Farmington Ave., Hartford 13, Conn. Representatives: Paul B. Cullen, Robert W. Mullins, Robert D. Blair, S. L. Essex, C. C. Phillips, W. R. Bristol, D. J. Rowe. Accident Prevention, both on and off the job—Driver Training Device.	102-103-104	—
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AMERICAN OPTICAL CO. Southbridge, Mass. Representatives: C. H. Galloway, J. T. Monahan, T. P. Welch, C. H. Jacobson, C. G. Albrecht, L. J. Freeman, J. J. Cohan, F. T. Ashe, P. F. O'Connell, W. E. Cornelius, R. J. Zimmerman, R. B. Burton, Ralph Tuminello, J. K. McCraney, R. M. Edmiston, C. A. Partenhimer, T. H. Hayden, A. R. Barrington, J. F. McKenna, A. W. Alberding, F. J. Donlea, W. G. Engel, John J. Hoffman, John C. Brownlee, J. O. Johnson, A. W. Nero, W. R. Lofgren. Manufacturers—Head, Eye and Respiratory Protective Devices; Safety Clothing and Safety Specialty Products.	79-80-81	22-23-B.C.

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ANSUL CHEMICAL CO. FIRE EQUIPMENT DIVN. Marinette, Wis. Representatives: L. C. McKeason, K. B. Covert, Arthur B. Guise, Jack R. West, Paul R. Larimer. Manufacturers and Distributors—Ansul Fire Extinguishing Equipment.	92-93	132-133
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BRISTOL-MYERS PRODUCTS DIVN. 630 Fifth Ave., New York 20, N. Y. Representatives: G. L. Wolcott, W. S. Eltinge, R. A. Dixon, C. E. Holmes, J. T. Alexander. Manufacturers of Pharmaceuticals.	211	—	CHEMICAL SPECIALTIES, INC. 54 Waltham Ave., Springfield, Mass. Representatives: C. E. Evans, Harold C. Sweet, Yoshio Yamashita. Manufacturers—Protective Hand Creams and Cleansers.	206	84
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BUHRKE, R. H., CO. 1403 W. Congress St., Chicago 7, Ill. Representatives: C. E. Clark, Miss M. M. Brown, Gene Harden, Paul W. Stiegler, Albert N. Thompson. Manufacturers—Safety Equipment for Construction and Maintenance.	110-111	97	COLUMBUS GLOVE MFG. CO. 1816 E. Fulton St., Columbus 3, Ohio Representatives: A. T. Francis, W. E. Brantner, F. D. Francis, George Brobeck. Manufacturers—Coated Gloves and Ap- rons.	146-147	—
BULLARD, E. D., CO. 275 Eighth St., San Francisco 3, Calif. Representatives: E. W. Bullard, E. W. Bullard, Jr., R. C. Mills, Paul O'Don- nell, Norris Seastrom, Dave Edwards. Manufacturers—Hard Boiled Caps and Hats, First Aid Kits, Belts, Hoods, Gas Masks, Air Purifiers, Bullard Burnham Safety Hooks.	127-128	59	COLUMBUS McKINNON CHAIN CORP. Tonawanda, N. Y. Representatives: F. T. Benjamin, M. J. McCarthy, R. N. Warnke, M. C. Hen- dershott, P. J. Baltes, G. F. Grace. Manufacturers—Alloy Steel Sling Chains.	68-69	61
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CHANCE, A. B., CO. 210 N. Allen St., Centralia, Mo. Representatives: H. A. Houston, O. G. Anderson, David Keller, David M. Holo- day, J. C. Blanton. Manufacturers—Hot Line Maintenance Tools and Line Construction Tools.	1	—			

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Manufacturers—Book Matches for Safety, Advertising and Sales Promotion Cam- paigns.			Publishers—Accident Prevention Displays; Safety Conference Programs; Supervisor's Weekly Bulletin; Bulletin Board Service.		
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Representatives: S. G. Smith, E. C. Rob- son, K. A. Fisher, M. C. Cadwallader, Ed Dussault.			Representatives: Walter Koch, E. J. Stack, Alvin Lewis.		
Manufacturers—Sanitation and Main- tenance Chemicals.			Manufacturers—Sign Making Equipment, Safety Poster Displays, Directory Signs, Visual Aids.		
DOCKSON CORP. 3839 Wabash Ave., Detroit 8, Mich.	142	147	EMERSON, J. H., CO. 22 Cottage Park Ave., Cambridge 40, Mass.	49	88
Representatives: H. E. Piggott, C. W. Piggott, Joseph Gray, Wayne Anderson.			Representatives: John H. Emerson, David I. Garrison, Paul Gebhard, Otis V. Ben- nett.		
Manufacturers—Goggles, Spectacles, Face Shields, Helmets. Distributors—Eyesaver, Respirators, Plastic Aprons.			Manufacturers—Resuscitation Equipment.		
DOW CORNING CORP. Midland, Mich.	221	161	FENDALL CO. 4611 N. Western Ave., Chicago 25, Ill.	44	84
Representatives: G. E. Marx, J. W. Wiley, J. W. Hayden, L. A. Guglielmo.			Representatives: John N. Liautaud, Philip J. Liautaud, Lyndon A. Long.		
Manufacturers—Sight Savers and Sight Saver Cleaning Stations.			Manufacturers—Head and Eye Protec- tion Equipment.		
DUNN PRODUCTS 1214 W. Madison St., Chicago 7, Ill.	23	206	FINNELL SYSTEM, INC. 500 East St., Elkhart, Ind.	61-64	45
Representatives: Edward R. Glick, Bernie McGawley, Bob Olson.			Representatives: Mrs. L. C. Finnell, Rob- ert M. Bliss, O. A. Newman, Vernon Leonard, A. A. Utke.		
Manufacturers and Distributors—Protec- tive Clothing for Industrial Workers Made from Asbestos, Leather, Rubber, Neoprene and Fire-Proofed Duck.			Manufacturers—Electric Scrubbing and Polishing Machines and Industrial Clean- ing Agents.		
EAGLE-PICHER SALES CO. 900 American Bldg., Cincinnati, Ohio	41	—	FIREYE CORPORATION 720 Beacon St., Boston 15, Mass.	219	—
Representatives: Robert L. Shirley, H. D. Noll, A. G. Holler, W. L. Simendinger, W. C. Heller, L. F. Steele, J. R. Pendry.			Representatives: E. D. Reddan, J. J. Cald- well, Fred I. Tourtelot.		
Producers—Eagle-Picher Industrial Floor, Dry No. 85. A heavy duty and anti-skid light reflecting absorbent for plant safety and maintenance.			Manufacturers—Electronic Flame Detec- tion Equipment.		
E & J MFG. CO. 100 East Graham Place, Burbank, Calif.	304	—	FRANKLIN RESEARCH CO. 5114 Lancaster Ave., Philadelphia 31, Pa.	143	93
Manufacturers and Distributors—Auto- matic Oxygen Resuscitation and Inhalation Equipment.			Representatives: V. Bushmiller, J. Simon, J. Burns.		
EASTERN METALS OF ELMIRA, INC. Elmira Heights, N. Y.	429	100	Manufacturers—Anti Slip Floor Main- tenance Materials.		
Representatives: Burleigh M. Names, Wal- ter Crow.			FROMMELT INDUSTRIES 290 Main St., Dubuque, Iowa	428	—
Manufacturers—Safety Signs and Devices.			Representatives: C. P. Frommelt, S. J. Frommelt, Mrs. Julia Frommelt.		
EDMONT MFG. CO. 1300 Walnut St., Coshocton, Ohio	25	—	Manufacturers—Portable Welding Shield and Protective Heat Cloth.		
Representatives: E. E. Montgomery, J. T. Montgomery, R. L. Prindle, R. M. Thom- as, C. U. Eyster, Will Martin, Tom Thackery.			GAMEWELL CO. Upper Newton Falls 64, Mass.	415	152
Manufacturers—Coated Fabric Work Gloves.			Representatives: W. Ben Flanigan, G. A. Swim, Thomas F. Murphy.		
			Manufacturer—Complete Industrial Fire Alarm and Watchmen's Reporting Systems.		
			GENERAL DETROIT CORP. 2272 E. Jefferson Ave., Detroit 32, Mich.	230	—
			Representatives: James A. Dick, W. H. Finley, H. L. Shelton.		
			Manufacturers—General Quick Aid Fire Extinguishers and Allied Items.		

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GLOBE COMPANY 4000 S. Princeton Ave., Chicago 9, Ill. Representatives: H. M. Donnelly, T. Walter Boydston, H. E. Lewis. Manufacturers—Grip Strut Grating.	410	220	INDUSTRIAL GLOVES CO. 700 Garfield St., Danville, Ill. Representatives: I. W. Millard, Jess A. Brewer, John R. Redenbaugh, J. E. Finegan, B. J. Fullen, Del F. Dodier. Manufacturers—Steel Grip Industrial Safety Apparel—Hand—Arm—Leg—Body Protection.	16-17	69
GROCORD RUBBER CO. 807 N. Jackson St., Lima, Ohio Representatives: J. S. McKindley, D. J. Wriggelsworth, J. L. Sergeant. Manufacturers—Gro Cord, Raw Cord and Neo-Cord Soles, Heels and Taps.	120	50	INDUSTRIAL PRODUCTS CO. 2820 N. Fourth St., Philadelphia 13, Pa. Representatives: E. Fred Shipman, Roger W. Shipman, E. W. Bender, Jr., R. W. Mounce. Manufacturers—IPCO Safety Equipment for All Industries.	411	55
HAWS DRINKING FAUCET CO. Fourth & Page Sts., Berkeley 10, Calif. Representatives: John E. Traynor, Mrs. Magnolia D. Haws, Ora B. Traynor. Manufacturers—Haws Emergency Eye Wash Fountains and Showers.	402	—	INSTITUTE OF INDUSTRIAL LAUNDERERS 1627 K St., N. W., Washington 6, D. C. Representatives: John W. Gibson, Troy Preston, Donald Dreifus. A Complete Coverall and Wiping Cloth Service for Industrial Plants.	212	96
HEWSON, JOHN, CO. 106 Water St., New York 5, N. Y. Representatives: John K. Hewson, Robert H. Metz, Jr., Walter E. Krause. Manufacturers—Takk High Speed Static Control Systems; High Voltage D. C. Insulation Testers and Staticators.	419	—	INSTOGAS CORP. 1977 E. Woodbridge Ave., Detroit 7, Mich. Representatives: A. L. Wiener, William W. Steinert, John L. Marley. Manufacturers—Underwriters and Factory Mutuals Approved Torches and Furnaces.	9	—
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HILLIARD CHEMICAL CO. 402 N. Third St., St. Joseph 1, Mo. Representatives: Elliott C. Spratt, Henry F. Bayer, Jr., J. J. Gafford, Sr. Manufacturers—Safe, Economical Floor Treatments, Building Maintenance, Sanitation Products, Equipment and Materials.	22	74	IRON AGE SAFETY SHOES, H. CHILDS & CO., INC. 1205 Madison Ave., Pittsburgh 12, Pa. Representatives: James H. Childs, Jr., C. E. Goffe, Robert H. Lohr, Andrew May, Harvey Childs, Jr., Frank Donley. Manufacturers—Complete Line Men's and Women's Leather and Rubber Industrial Safety Footwear.	50	28-29
HOLLAND-RACINE SHOES, INC. 186 W. 15th St., Holland, Mich. Representatives: Larry J. Geuder, H. Bradley Nelson, Lyle K. Johnson. Manufacturers—McCoy Safety Toe Shoes.	424	—	JONES, C. WALKER, CO. 6135 N. Lambert St., Philadelphia 38, Pa. Representatives: C. M. Mehaffie, Robert Wolfe, E. P. Bliss. Manufacturers—Jomac Industrial Gloves and Knitted Specialties.	217	144
HUNTINGTON LABORATORIES, INC. 900 E. Tipton St., Huntington, Ind. Representatives: Jack S. Haney, Robert Quinn, Wray Norton, William J. Cerney, Clare Bristol. Manufacturers—Sanitation and Cleaning Products; Floor Machines; Special Product Development.	208	88	JONES & CO. 125 Catlin Ave., Rumford, R. I. Representative: Kenyon Jones. Manufacturers—Full Vision Safety Visor Goggles.	214	—
HYGIENE RESEARCH, INC. 684 Broadway, New York 12, N. Y. Representatives: Mrs. L. Mason Lyons, N. M. Elias. Manufacturers—Protective Creams for the Skin and Mistproofing Cloth for Goggles and Windshields.	416	86-1	JUNKIN SAFETY APPLIANCE CO., INC. 101 S. Floyd St., Louisville 2, Ky. Representatives: John I. Junkin, Juanita Junkin. Manufacturers—Junkin Interlocking Barrier Gate Guard; Swinging Die Closure; Electro-Lock Shield; Split Type Stretcher, Stretcher Cabinets.	136	162-176
HY-TEST DIVN., INTERNATIONAL SHOE CO. 1509 Washington Ave., St. Louis 3, Mo. Representatives: Norman C. Whitsett, Edward B. Lang, Otto A. Andre. Manufacturers—Hy-Test Anchor Flange Steel Toe Safety Shoes.	95	24-25	JUSTRITE MFG. CO. 2061 Southport Ave., Chicago, Ill. Representatives: J. N. Grimshaw, H. J. Dahl, I. J. White, W. J. Mitchler. Manufacturers—Safety Cans; Oil Waste Cans; Safety Electric Lanterns; Flashlights and Fire Extinguishers.	18	93

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Distributors—Industrial Hospital Supplies and Equipment; Drugs, Dressings, Furniture, Instruments.			Manufacturers—Leather Safety Box Toe Shoes and Rubber Boots.		
KELLEY-MAHORNEY CO. 1445 S. 15th St., Louisville 10, Ky.	213	100	LIGHTFOOT SCHULTZ CO. 663 Fifth Ave., New York 22, N. Y.	47	211
Representative: John R. Kelley.			Representatives: W. E. Pemberton, Oscar O. Baddeley, J. D. Compton, S. P. Dolan.		
Manufacturers—Convoy Skid-Proof Enamel.			Manufacturers—Powdered, Liquid and Bar Soap Skin Cleansers and Dispensers.		
KEYSTONE VIEW CO. Meadville, Pa.	150	90	LITTELL, F. J., MACHINE CO. 4127 Ravenswood Ave., Chicago 13, Ill.	416	101
Representatives: Paul L. Anderson, C. J. McLaughlin, Edward Lenzen.			Representatives: F. M. Littell, George Pearson, Charles E. Monell.		
Manufacturers—Original Binocular Visual Screening Tests for Industry.			Manufacturers—Punch Press Safety Equipment.		
KIDDE, WALTER, & CO., INC. 675 Main St., Belleville 9, N. J.	425-426	157	LOGAN EMERGENCY SHOWERS, INC. 721 E. Broadway, Glendale, Calif.	408	—
Representatives: P. W. Eberhardt, W. E. Healey, J. E. McAllister, T. W. Brooks, S. Grant.			Representatives: Hugh H. Logan, M. J. Johnson, Ralph Struck.		
Manufacturers—Fire Protection and Extinguishing Equipment.			Manufacturers—Functionally Designed Equipment for Shower Bathing.		
KIMBALL SAFETY PRODUCTS CO. 9310 Wade Park Ave., Cleveland 6, Ohio	96	167	LOUISVILLE LADDER CO. 1101 W. Oak St., Louisville 10, Ky.	226	72
Representatives: D. E. Kimball, O. E. Kimball.			Representatives: Frank S. Smith, Jr., John F. Myers, Walter A. Rose.		
Manufacturers—A Complete Line of Personal Protection Equipment.			Manufacturers—Aluminum Ladders, Scaffold Products and Related Equipment.		
KIMBERLY-CLARK CORP. Neenah, Wis.	232	207	LOWERY BROTHERS 9332 So. Anthony Ave., Chicago 17, Ill.	409	70
Representatives: Russ J. Piltz, Jim Stauff, Jim E. Kirk, Reed L. Hoots.			Representatives: John W. Lowery, John R. McShane, William O. Hicks.		
Manufacturers—Industrial Wiping Tissues.			Wire Rope Splicing Service.		
KLEIN, MATHIAS, & SONS 3200 Belmont Ave., Chicago 18, Ill.	65-66	98	LUTHER MFG. CO., INC. 126 Sullivan St., Olean, N. Y.	31	95
Representatives: Mathias A. Klein, M. A. Klein, Jr., H. B. Wilson, Jr., Charles Castino, A. L. Moore, H. Segessman, R. Hoerger, Crit Woolsey, J. McAmis, B. E. Rogers, John Gormley.			Representatives: James H. Luther, M. L. Brown, George S. Anderson.		
Manufacturers—Linemen's Tools and Equipment.			Manufacturers—Power Press Guards.		
KNAPP BROTHERS SHOE MFG. CORP. 173 Spark St., Brockton, Mass.	126	64	MacWHYTE COMPANY 2902 Fourteenth St., Kenosha, Wis.	78	63
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Manufacturers—Knapp Saf-Test Shoes.			Manufacturers—Wire Rope Slings, Wire Rope and Wire Rope Assemblies.		
KUNZ, J., GLOVE CO. 2141 W. North Ave., Chicago 47, Ill.	406	—	MAICO CO., INC. 21 N. 3rd St., Minneapolis 1, Minn.	218	92
Representatives: Edward P. Yauch, Joseph Yauch, William Hampel.			Representatives: Arne T. Darbo, Mrs. Harvie Watson, Don Jensen.		
Manufacturers—Linemen's, Bridgemen's and Welder's Quality Gloves.			Manufacturers—Audiometers, Auditory Training Equipment, Stethetrans and Hearing Aids.		
LEGGE, WALTER G., CO., INC. 101 Park Ave., New York 17, N. Y.	36-37	55	MARSH & McLENNAN, INC. 231 S. LaSalle St., Chicago 4, Ill.	134-135	216
Representatives: J. Paul Glenn, John Hennessy, Orval D. Nelson, Anthony Dirksmeyer, R. F. McConville, Hal C. Frazier, Albert J. Steiner, J. E. McLaughlin, E. Willard Merritt, Chalmers D. Close.			Representatives: L. A. Foschimbaur, R. W. Hutchinson, Robert J. Sipchen, Kenieth E. Reed, Frank H. Harrison.		
Manufacturers—Safety Floor Preparations; Conductive Floor Coating; Static Grounding Devices for Personnel.			Insurance Brokers and Agencies.		
			MARTINDALE ELECTRIC CO. Box 617, Edgewater Br., Cleveland 7, Ohio	209	—
			Representatives: Roy E. Biersch, Florence Biersch, Joseph Rick.		
			Manufacturers—Martindale Protective Dust Mask and Electrical Testing Instruments.		

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MASURY-YOUNG CO. 76 Roland St., Boston 29, Mass.	224-225	165	Manufacturers—Ply Protective Creams, Ply Garb Plastic Clothing, Ply Gloves, Plastic Work Gloves.		
Representatives: D. M. King, R. D. Lane, L. W. Dee, P. C. Archer, S. E. Kredler			MILLER EQUIPMENT CO., INC. 13th and New Sts., Franklin, Pa.	144-145	39
Manufacturers—Floor Maintenance Ma- terials.			Representatives: R. J. Miller, J. C. Nelms, Jr., E. C. Shawgo.		
McAN, THOM, SAFETY SHOE DIVN., MELVILLE SHOE CORP. 25 W. 43rd St., New York 36, N. Y.	118	73	Manufacturers—Linemen's and Industrial Safety Belts.		
Representatives: William J. Smith, M. K. Ailyn, Carl Dowell, Edward Serrapede, Jack Speer, Troy Corder, George Weyl, Albert Taber, Walter Schember, Martin Gates, John Yudt, Peter Goldschmeding, Martin Butler.			MINE SAFETY APPLIANCES CO. Braddock, Thomas & Meade Sts., Pittsburgh, Pa.	83-84- 85-86	I.F.C. 18-19
Manufacturers and Distributors—Thom McAn Safety Shoes.			Representatives: J. T. Ryan, Jr., C. M. Donahue, George H. Deike, J. B. Davies, F. A. King, M. L. Symington, B. W. Cata- lane, E. W. Merry, E. M. Whitt, J. J. McCluskey, C. H. Sanderson, J. F. Ken- nedy, H. R. Johnson, D. F. McElhannon, V. W. Buys, V. A. Stanton, C. V. Miller, H. W. Richards, R. A. Pohl, G. W. Lasch- er, E. C. Brainerd, H. N. Trice, C. H. Mehaffey, J. S. Moore, H. N. Gruber, J. W. McCrackin, C. R. Dever.		
McDERMOTT, JULIAN A., CORP. 40-22 National St., Corona, L. I., N. Y.	60	—	Manufacturers—Safety Equipment for Every Industry.		
Representatives: Julian A. McDermott, Harry Davis, Jr., Robert Fleming.			MT. PITT CO. Box 1563, Medford, Ore.	309	—
Manufacturers—Warning and Safety Lights for Municipal, Industrial, Utility and Aviation use.			Representatives: Claude C. Haggard, Rob- ertson E. Collins.		
McDONALD, B. F., CO. 5721 W. 96th St., Los Angeles 45, Calif.	61-62	30-31	Manufacturers—First Aid Stretcher.		
Representatives: B. F. McDonald, J. P. Repp, J. J. Delahide, K. S. Butler, D. M. Cook.			NATIONAL BUREAU OF STANDARDS Washington 25, D. C.	229	—
Manufacturers and Distributors—Industrial Safety Appliances and Clothing.			NATIONAL SAFETY COUNCIL 425 N. Michigan Ave., Chicago 11, Ill.	155	168-169- 170-181
MEDICAL SUPPLY CO. 1027 W. State St., Rockford, Ill.	137-138	34-35	Representatives: W. G. Johnson, D. A. Pickerell, H. W. Champlin, Ruth Parks, John Lamont, Robert Powell, Lois Zearing, Georgia Maschke.		
Representatives: Gordon P. St. Clair, Gor- don C. Nelson, A. F. Johnson, J. P. Campbell, Richard G. Babbitt, Richard P. Whitney, Paul W. Saunders.			NATIONAL SOCIETY FOR THE PREVENTION OF BLINDNESS, INC. 1790 Broadway, New York 19, N. Y.	302	—
Manufacturers—Flexible Unit First Aid, Snake Bite First Aid, Burn First Aid.			Representative: James E. O'Neil.		
MELFLEX PRODUCTS CO., INC. 410 S. Broadway, Akron 8, Ohio	210	89	Educational Material on Conservation and Utilization of Eyesight in Industry.		
Representatives: L. E. Warford, Mrs. L. E. Warford, John L. Habersbusch.			NEWMAN MFG. & SALES CO. 205 Westport, Kansas City 11, Mo.	427	94
Manufacturers—Flooring Materials, Treads and Standing Mats.			Representatives: J. G. Gale, Tom P. Fulham, W. Omer Brenton.		
METAL ARTS CO., INC. 742 Portland Ave., Rochester 21, N. Y.	405	209	Manufacturers—Newco Combination Wire Rope Clamp and Thimble.		
Representative: Joseph J. Mandery.			OCCUPATIONAL HAZARDS, INC. 1240 Ontario St., Cleveland 13, Ohio	54	—
Manufacturers—Safety Award Lapel Em- blems, Rings, Badges, Trophies, Plaques.			Representatives: Irving B. Hexter, Edwin M. Joseph, Harry E. Burwasser, Publishers.		
METROPOLITAN LIFE INSURANCE CO. 1 Madison Ave., New York 10, N. Y.	139	—	OIL-DRI CORP. OF AMERICA 520 N. Michigan Ave., Chicago 11, Ill.	148-149	85
Representatives: Thomas J. Berk, Miss Mary Conway.			Representatives: Nick Jaffe, A. L. Swerd- lik, Woodrow A. Jaffe, Bernard Jaffe, Paul K. Robertson, Bert Frankel.		
Educational Publications and Materials Dealing with Safety.			Manufacturers—Oil Dri Absorbents and Non Slip Paint.		
MICRO SWITCH DIVN. MINNEAPOLIS HONEYWELL CO. Freeport, Ill.	414	—	ONOX, INC. 121 Second St., San Francisco 5, Calif.	40	171
Representatives: F. N. Burt, Dick Thomp- son, Bill Slater.			Representatives: H. A. Jansen, Robert de Fremery, L. C. Egner.		
Manufacturers—MICRO Trip-Electric Clutch Control for Power Machines.			Distributors—Onox Skin-Toughener for Athlete's Foot.		
MILBURN CO. 1246 E. Woodbridge, Detroit 7, Mich.	59	—			
Representatives: J. A. Stifter, Glen E. Leach, George Cole.					

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ORTHOPEDIC EQUIPMENT CO. Bourbon, Ind.	418	98
Representatives: F. T. Saemann, Virgil Risner, J. Keaton Landis.		
Manufacturers—Litters, Emergency Splints, First Aid Kits, Conn Tourniquets, Fracture Equipment.		
OSBORN MFG. CORP. Argonne Road, Warsaw, Ind.	220	214
Representatives: R. E. Osborn, Forrest Mitterling.		
Manufacturers—Safety Pliers and Tongs for Feeding Punch Presses.		
PACKIT COMPANY 175 Greenwich Ave., Greenwich, Conn.	39	96
Representatives: William W. Fallon, Cecil R. Brown.		
Manufacturers—First Aid Equipment.		
PACKWOOD, G. H., MFG. CO. 1545 Tower Grove Ave., St. Louis 10, Mo.	94	48-49
Representatives: M. S. Gravely, Earl A. Hassebrook, A. J. McLaughlin.		
Manufacturers—"Pax" Safety Industrial Skin Cleansers and Dispensers.		
PARKER SWEEPER CO. 91-99 N. Bechtle Ave., Springfield 99, Ohio	412	—
Representatives: R. A. Jablonski, Al Utthe.		
Manufacturers—Industrial Floor Sweepers.		
PATENT SCAFFOLDING CO., INC. 1550 Dayton St., Chicago 22, Ill.	98-99	42-43
Representatives: Nels F. Borgaard, Earl Wenthof, Burnell Duclos, Ray Morley, E. Klein.		
Manufacturers—Gold Medal Wood and Magnesium Safety Ladders, Suspended Sectional Tubular Steel and Aluminum Scaffolding, Sidewalk Protection Canopies, Steel Grandstands.		
PENNSYLVANIA OPTICAL CO. 234 S. 8th St., Reading, Pa.	202	37-38
Representatives: James Hornberger, Peter Sebastian, Edward L. Clark, C. H. Reilly, Lester Gooch.		
Manufacturers—Head and Eye Protective Equipment.		
PERMAMIX CORP. 228 N. LaSalle St., Chicago 1, Ill.	438	217
Representatives: John C. Schmidt, Jr., Byron W. Duff, Jack Schmidt, John K. Riley.		
Distributors—Industrial Floor Patching Material (PERMAMIX).		
PORTO-CLINIC INSTRUMENTS, INC. 298 Broadway, New York 7, N. Y.	204	—
Representatives: Dick Sheppard, Dr. Herbert J. Sheppard, Ted Sweets.		
Manufacturers Distributors—Driver Testing and Training Equipment, Glare Recovery and Night Vision Equipment, Magnetic Traffic Boards, Stopping Distance Meters, Cardoon Systems, Auto Drive Visual Set, and other Driver Safety Aids.		
POSITIVE SAFETY MFG. CO. 4408 Perkins Ave., Cleveland 3, Ohio	41	218
Representatives: E. U. Whitacre, Miss Eliza Reed.		
Manufacturers—Power Press Guards.		
POWDER ACTUATED TOOL MANUFACTURERS' INSTITUTE 250 East 43rd St., New York, N. Y.	421	—
Representatives: Robert Chatterton, Townsend Wheeler, R. R. Baumann.		
Association of Manufacturers.		

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PRAIRIE STATE PRODUCTS CO. 1822 Lawrence Ave., Chicago 25, Ill.	311	205
Representatives: S. S. Blumenthal, George Blumenthal, H. L. Hiett.		
Manufacturers—Metal Safety Signs, Electrical Exit and Directional Signs.		
PROTECTOSEAL CO. 1920 S. Western Ave., Chicago 8, Ill.	105-106	83
Representatives: W. E. Belt, C. J. Beckman, D. P. Anschicks, G. T. McCarty, C. R. Peck, R. H. Folkemer, S. L. White.		
Manufacturers—Fire Prevention Equipment for Flammable Solvents.		
PULMOSAN SAFETY EQUIPMENT CORP. 644 Pacific St., Brooklyn 17, N. Y.	20	—
Representatives: Samuel Weiss, Howard M. Weiss, Frank Rodak, Larry Foley, Bernard Swift, Emil Miksch.		
Manufacturers—Industrial Safety Equipment.		
PYRENE MFG. CO. 560 Belmont Ave., Newark 8, N. J.	125	57
Representatives: S. C. Williams, Jr., W. W. Kempfert, Norman L. Rockey.		
Manufacturers—Diversified Approved Fire Extinguishers, Recharges, Air Foam, Play pipes, Systems.		
RACINE GLOVE CO., INC. Box 202, Rio, Wis.	437	—
Representatives: O. Reed Bigelow, Fredrick P. Otting, A. P. Yonis.		
Manufacturers—Gloves, Apparel, Protective Equipment, Leather, Asbestos and Steel Reinforced.		
RANDOLPH LABORATORIES, INC. 8 E. Kinzie St., Chicago 11, Ill.	132-133	182
Representatives: Glen S. Roberts, Jr., Walter Lee, Bob Boylan, Donald Roberts, Bob Cook, Frank Gunneen, George Kuhlmann.		
Manufacturers—Dioxide Fire Extinguishers.		
REECE WOODEN SOLE SHOE CO. 13th St. and 41st Ave., Columbus, Nebr.	115	91
Representatives: Dorothea Reece, Gus Bergman, Genevieve Reece.		
Manufacturers—Reece "Perfect Rocker" Wooden Sole Safety Footwear.		
RIEDEL TEXTILE CORP. 260 Madison Ave., New York 17, N. Y.	431	175
Manufacturers—Work Gloves and Mittens.		
ROCKWOOD SPRINKLER CO. 38 Harlow St., Worcester 5, Mass.	19	36
Representatives: James J. Ryan, A. B. Mullen, E. P. Hughes.		
Manufacturers—Automatic Fire Protection Systems; Sprinklers, WaterFog, FogFoam, and Foam.		
ROSE MFG. CO. 1731 Arapahoe, Denver 2, Colo.	45	60
Representatives: C. W. Rose, Charles R. Ewing, Jon E. Sharp, Miss Mary Urkulik, Mrs. C. W. Rose.		
Manufacturers—Safe Hi Line of Safety Equipment.		
SAFETY BOX TOE CO. 812 Statler Office Bldg., Boston 16, Mass.	231	46-47
Representatives: Wirt G. Greenan, Charles E. Beckwith.		
Manufacturers—Safety Steel Box Toes.		
SAFETY CLOTHING & EQUIPMENT CO. 1990 E. 69th St., Cleveland 3, Ohio	55-56	79
Representatives: E. H. Brooks, Lillian Brooks, Lee Debes, Norman J. McLeod, Robert Speidel.		
Manufacturers—Safety Clothing and Equipment for Every Type Industrial Worker.		

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SAFETY FIRST PRODUCTS CORP. 175 Saw Mill River Road, Elmsford, N. Y. Representatives: Martin B. Fleming, Jere B. Fleming, Roger R. Cholin. Manufacturers and Distributors—Dry Chemical Fire Equipment.	223	68	Representatives: S. Gordon Taylor, Francis J. Feeney. Manufacturers—Hearing Aids and Hearing Test Equipment (Audiometers).		
SAFETY FIRST SHOE CO. Water St., Holliston, Mass. Representatives: John E. Flegel, Louis Rubin, O. J. Goodrich. Manufacturers—Safety Steel Toe Shoes for Men.	57	76	STANDARD SAFETY EQUIPMENT CO. 232 W. Ontario St., Chicago 10, Ill. Representatives: L. E. Dickson, Robert J. Dee, George G. Dickson, John N. DeRoulet, Robert Christensen, Earl J. Hoagland, A. O. Schmidt, Donald Spoerer, Harry J. Miller, John J. Bendokas, Courtney G. Fleming, Maynard Page, Richard W. Ware, George Wolnez. Manufacturers and Distributors—Industrial Safety Equipment.	14-15	194-221
SAFETY TOWER LADDER CO. 1024 Burbank Blvd., Burbank, Calif. Representatives: F. R. Herod, J. Van Voorhees, C. H. Aldrich. Distributors—Tower Ladder Safety Device and Safety Lifeline Lock.	425	207	STEEL SCAFFOLDING CO., INC. 856 Humboldt St., Brooklyn 22, N. Y. Representatives: N. A. Engelen, Edwin J. Beinecke, Jr., Oscar Junggren. Manufacturers—"Trouble Saver" Steel Scaffolding.	97	44
SAFWAY STEEL PRODUCTS, INC. 6228 W. State St., Milwaukee 13, Wis. Representatives: James C. Jay, Richard Van Derkiet, Robert T. Allis. Manufacturers—Steel Scaffolds and Overhead Maintenance Equipment.	7	—	STEPAN CHEMICAL CO. 20 No. Wacker Drive, Chicago 6, Ill. Representatives: W. H. Popp, Wm. F. Tomlinson, W. J. Crepeau. Manufacturers and Distributors—Dermatologically Correct Industrial Skin Cleansers.	29	92
SALISBURY, W. H. & CO. 401 N. Morgan St., Chicago 22, Ill. Representatives: T. R. Claffy, W. H. Salisbury, M. J. Allison, Don L. Reitz, R. J. Arens. Manufacturers—Linemen's Rubber Protective Equipment.	90-91	90	STEPHENSON CORP. Red Bank, N. J. Representatives: William H. Stephenson, Jack Rinaldi, Albert E. McKee. Manufacturers—Resuscitation Equipment and Chemical Tests for the Determination of Intoxication.	203	—
SANIMIST, INC. 1724 Chestnut St., Philadelphia 3, Pa. Representative: D. O. Dougherty. Manufacturers—Athlete's Foot Preventive.	121	188	STONEHOUSE SIGNS, INC. 842 Larimer St., Denver 4, Colo. Representatives: Bertrum Burton, Georgia Burton. Manufacturers—Steel Accident Prevention Signs.	129	102
SCHRADER'S, A., SON 470 Vanderbilt Ave., Brooklyn 38, N. Y. Representatives: Frank L. Engstrom, James W. Rigley, J. J. Meister, E. P. Rielley, A. S. Jorgensen. Manufacturers—Pneumatic Press Controls, Valves, Cylinders and Associated Products.	12-13	51	STOP-FIRE, INC. 125 Ashland Place, Brooklyn 1, N. Y. Representatives: Paul Nurkiewicz, Edward S. Nurkiewicz, Alex H. Blakely. Manufacturers—Fire Extinguishers.	407	65
SCIENTIFIC INDUSTRIAL SUPPLY CO. 2958 S. Vernon Ave., Chicago 16, Ill. Representatives: David D. Greenspon, J. Patrick Wilson, William Lazar. Manufacturers—Gloves, Clothing and General Safety Equipment.	301	—	SURETY RUBBER CO. Carrollton, Ohio Representatives: S. S. Hall, C. E. Roser, Carl Gotschall. Manufacturers—Rubber Gloves and Linemen's Equipment.	67	221
SCOTT AVIATION CORP. 207 Erie St., Lancaster, N. Y. Representatives: Earle M. Scott, L. E. Jordan, Ralph Banks, Wm. G. Eckman, Richard Noelek, W. W. Wallace, Arthur Miller, H. A. Benzel. Manufacturers—Scott AirPak, Demand Inhalator, Demand Respirator.	21	77	SURTY MFG. CO., INC. 4139 W. Kinzie St., Chicago, Ill. Representatives: K. M. Fowler, H. W. Beegle, W. B. Ranville. Manufacturers and Distributors—Safety Guards and Materials.	131	—
SELLSTROM MFG. CO. 615 Aberdeen St., Chicago 22, Ill. Representatives: Carlton E. Dennis, C. G. Anderson, P. E. Hoy. Manufacturers—Face and Eye Protection Equipment.	30	62	TAYLOR, S. G., CHAIN CO. 1—141 St., Hammond, Ind. Representatives: O. W. Sandstrom, S. N. Morrison, E. W. Chapman, E. O. Sandstrom. Manufacturers—Taylor Made Alloy Steel Sling Chains and Tayco Safety Hooks.	8	78
SENTRY SHOE CO. 119 7th Ave. N., Nashville, Tenn. Representatives: Guy Rudisill, Miller Y. Hunter, William J. Kelly, Jr. Manufacturers—Safety Toe Shoes.	228	—	TENNANT, G. H., CO. 2530 N. Second St., Minneapolis 11, Minn. Representatives: Orville C. Hognander, Melvin H. Laikola, E. A. Detweiler, Merion E. Hillyer, V. E. McCarthy. Manufacturers—Heavy Duty Industrial Floor Machines, Power Sweepers, and Supplies.	14-15	81
SONOTONE CORP. Elmsford, N. Y.	422	87			

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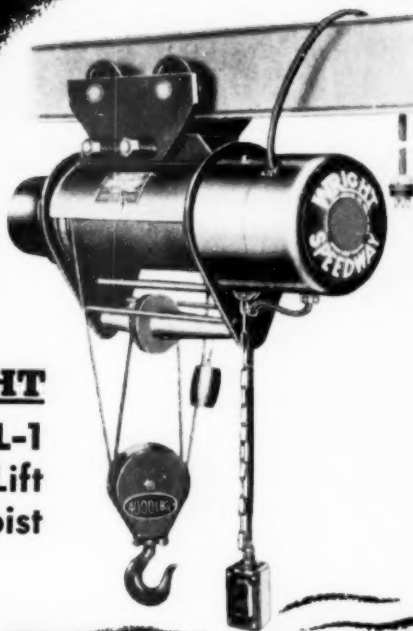
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TIMMINS SPLINT CO. 1105 Farnam St., Omaha 2, Nebr. Representative: M. J. Timmins. Manufacturers—Emergency All-Purpose Splints.	420	—	WATCHEMOKET OPTICAL CO., INC. 232 W. Exchange St., Providence 3, R. I. Representatives: Ernest A. Ring, Margaret O'Rourke, James G. Kuester. Manufacturers—"Eye Savers" Plastic Eye Protection and Plasi-Glow Safety Signs.	140-141	26-27
TREESDALE LABORATORIES AND TEXTILE PROCESSING CO., INC. Benedum-Trees Bldg., Pittsburgh 22, Pa. Representatives: J. A. Beattie, Edward V. Karabin, H. Zane Knauss. Manufacturers—Safety Clothing, Chemical Flameproofing, Mildew Proofing and Water Proofing Compounds.	207	—	WAVERLY PETROLEUM PRODUCTS CO. 1724 Chestnut St., Philadelphia 3, Pa. Representatives: E. P. Frankel, E. B. Bryan, H. B. Miles, O. Roncone, Robert Heffner, L. M. Henry, E. W. Coogan, Wm. H. Luecker. Manufacturers—Oil and Grease Absorbents.	122-123	150
TRINAL, INC. 634 N. Orleans St., Chicago 10, Ill. Representatives: J. J. Boughey, G. E. Semple, J. Roy Abell. Manufacturers—"Safeet" Protection for the Metatarsal Arch.	134	—	WELSH MFG. CO. 9 Magnolia St., Providence 9, R. I. Representatives: Ralph H. Wheelock, J. Kenton Speil. Manufacturers—Safety Goggles, Lens, Faceshields and Helmets.	32	52-53
U.C.LITE MFG. CO. 1050 W. Hubbard St., Chicago 22, Ill. Representatives: C. G. Talbot, A. Tilkin, A. H. Davis. Manufacturers—Portable Electric Hand Lamps and Emergency Lights.	308	—	WEST DISINFECTING CO. 42-16 West St., Long Island City 1, N. Y. Representatives: Wm. Flatow, Jr., T. Z. Van Raalte, Glen Buerki, Glen Bothwell, B. O'Connor. Manufacturers—Products for the Promotion of Industrial Health and Sanitation.	88-89	71
UNION WIRE ROPE CORP. 21st & Manchester Ave., Kansas City, Mo. Representatives: Robert B. Board, Ray G. Noble, D. B. Currence, R. L. Creamer, M. K. Hass, Leslie A. Price. Manufacturers—Wire Rope, "Tuffy" Slings and "Tuffy" Towlines.	11	54	WHEELER PROTECTIVE APPAREL, INC. 224 W. Huron St., Chicago 10, Ill. Representatives: Edison L. Wheeler, Hudson L. Wheeler, Bill Fla. Havhan, Pete Gulyas, Helmet Jenke, Flory Nicpon. Manufacturers—Industrial Safety Clothing for Heat and Abrasive Hazards.	77	66
U. S. INDUSTRIAL GLOVE CORP. 9350 Roselawn, Detroit 4, Mich. Representatives: R. J. Donovan, Leo Seligson, John P. Kushner. Reconditioning Work Gloves.	410	—	WILKINS CO., INC. Cortland, N. Y. Representatives: Ralph R. Wilkins, Richard S. Wilkins. Manufacturers—K-Lens-M Products: Goggle Stations, Lens Cleaner, Anti-Fogging Liquid, Lens Tissue.	58	67
UNITED STATES SAFETY SERVICE CO. 1215 McGee St., Kansas City 6, Mo. Representatives: A. F. Parmelee, R. J. Russell, T. J. O'Brien, G. R. Adair, D. T. O'Shea, E. P. Lindstrom, R. E. Schmidt. Manufacturers—Industrial Goggles, Protective Hats, Faceshields, Welding Helmets, Impregnated Salt Tablets and Allied Safety Equipment.	100-101	80	WILLIAMS JEWELRY & MFG. CO. 10 S. Wabash Ave., Chicago 3, Ill. Representatives: Clarence J. Williams, C. B. Williams, R. W. Duda. Manufacturers—Safety Awards, Badges and Trophies.	48	228
VESTAL, INC. 4963 Manchester Ave., St. Louis 10, Mo. Representatives: L. A. Gray, H. Uttenweiler, L. J. Drone, J. Dieter. Manufacturers—Ves-Cote Slip Resistant Floor Wax; Vestal-SDC Liquid Skin Degreasing Soap; Briten Floor Cleaner; Skleen Liquid Detergent Floor Cleaner; Staphene Germicide Disinfectant; Vestral Floor Machine.	216	205	WILLSON PRODUCTS, INC. 2nd & Washington Sts., Reading, Pa. Representatives: T. A. Willson, T. A. Willson, Jr., S. C. Herbine, W. D. Gross, J. G. Simmons, M. F. Shields, Robert P. Henry, R. A. George, R. S. Moore, Jr., P. D. Brown, H. A. Pullis, Jr. Manufacturers—Industrial Goggles, Gas Masks, Helmets and Respirators, and Allied Safety Devices.	107-108-109	14-15
WAGNER SIGN SERVICE, INC. 218 S. Hoyle Ave., Chicago 12, Ill. Representatives: E. Wagner, Mrs. E. D. Wagner, W. Jacobsen, A. B. Balch, J. F. Stokes. Manufacturers—Signs—Changeable Copy; Enduronamel Panels; Translucent Plastic Letters.	234	—	WINKO-MATIC SIGNAL CO. 750 Broadway, Lorain, Ohio Representatives: Irwin Hart, Benjamin Hart, D. C. Rieger. Manufacturers—Activating Signals for Traffic Warning Signs; Illuminated Directional Control Signs; Distributors—Highway Warning Signs; Traffic Marking Paint.	411	—
WASH-RITE CO., INC. 1414 Cornell Ave., Indianapolis 2, Ind. Representatives: James E. Silvey, Robert L. Vatters, Joe W. Silvey, William O. Pitcock. Cleansers—Processors Gloves, Aprons, and Protective Clothing. Distributors—Gloves, Aprons.	411	—	WOLVERINE SHOE & TANNING CORP. Rockford, Mich. Representatives: Oliver Hopkins, Wendell Roskelley, Joe Vogel, John Moyle. Manufacturers—Industrial Safety Shoes.	201	—
			WYANDOTTE CHEMICALS CORP. Wyandotte, Mich. Representatives: R. J. Racine, T. S. O'Donoghue, E. J. Kubis. Manufacturers—All Purpose Floor Absorbent and Industrial Cleaning Compounds.	70	183

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Long Lift
Speedway Hoist



***You Can Lift 2 Tons 20 Feet
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The L-1 WRIGHT Speedway has a lift of 20 feet and is reeved with a 4-part single line that wraps in a single layer on a grooved drum. In either of two speeds, lifting or lowering is smooth and stable, so it is fine for either intricate lifting jobs or production material handling.

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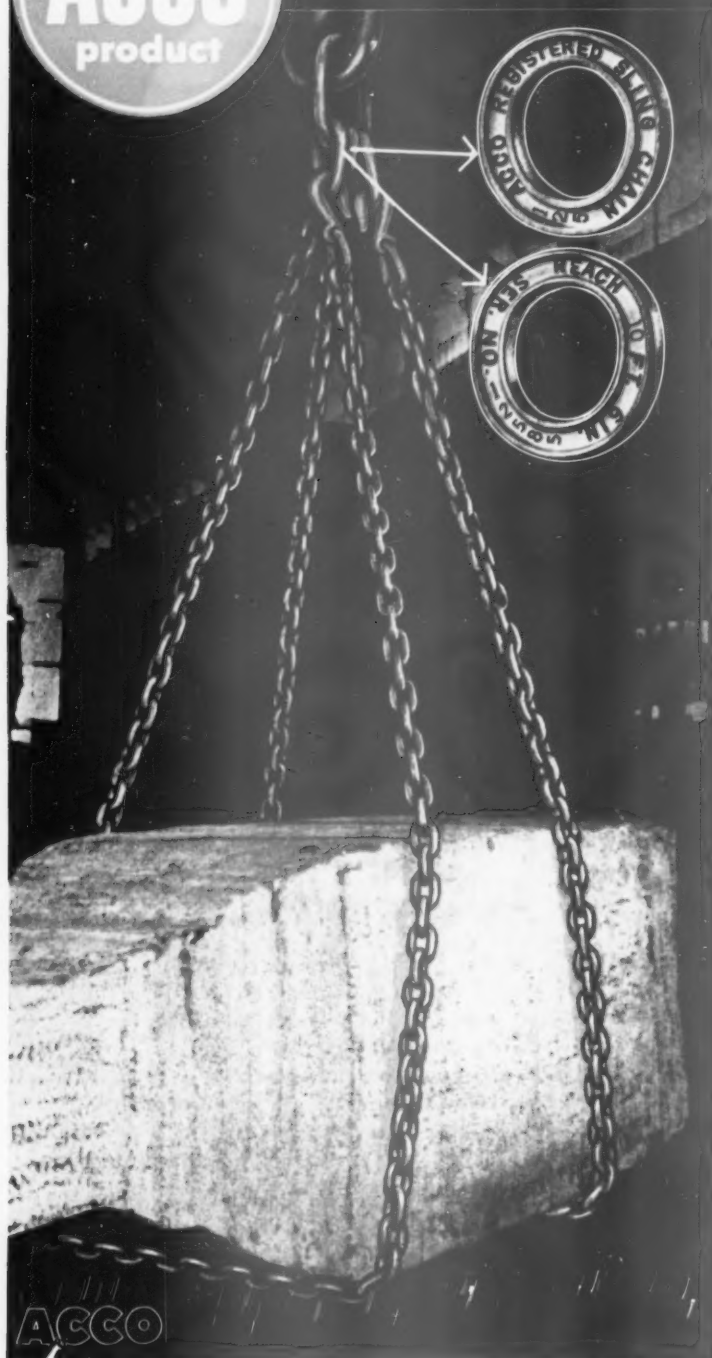
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AMERICAN CHAIN & CABLE**

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"Why We Handle Forgings with American Chain"

"Most of our forgings are clumsy shapes, heavy, and awkward to handle. The American chain recommended to us is flexible and smooth. The ratio of the weight of the chain to its strength makes it easy for our men to handle it. They like the grab hooks which slide quickly into place and hold fast."

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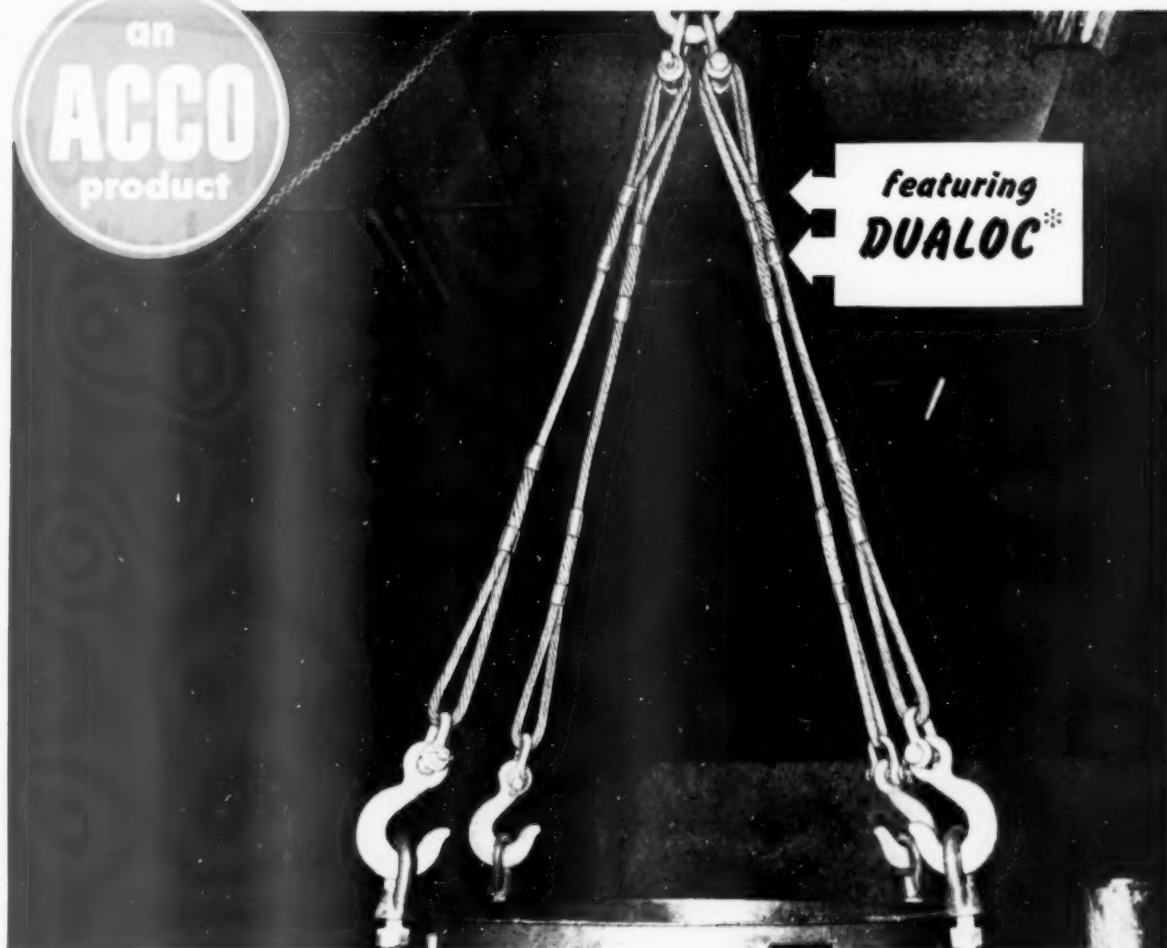
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DUALOC® Endings insure against any loss in the catalog strength of the preformed Green Strand wire rope the sling is made of.

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3 • ACCO Slings are Stocked by Your Industrial Supply House—His stock is based on YOUR needs.

So, your sling inventory can be held to a minimum since your distributor's stock is as close as your telephone.

4 • These Slings and Fittings are "ACCO Registered"—This assures you of highest quality and safety throughout.

Write today to our Wilkes-Barre office for name of the ACCO Registered Sling distributor nearest you.

*Trade Mark • Patent No. 2163199

ACCO

In Canada: Dominion Chain Co. Ltd., Niagara Falls, Ontario



**WIRE ROPE SLING DEPARTMENT
AMERICAN CHAIN & CABLE**

Wilkes-Barre, Pa., Chicago, Denver, Houston, Los Angeles, New York,
Odessa, Tex., Philadelphia, Pittsburgh, San Francisco, Bridgeport, Conn.



**ASK for WILLSON-
of industrial
AND EASY**

WILLSON
Never-Mor goggles
Strong—Light—Comfortable

SAFETY NEWS
FU-4

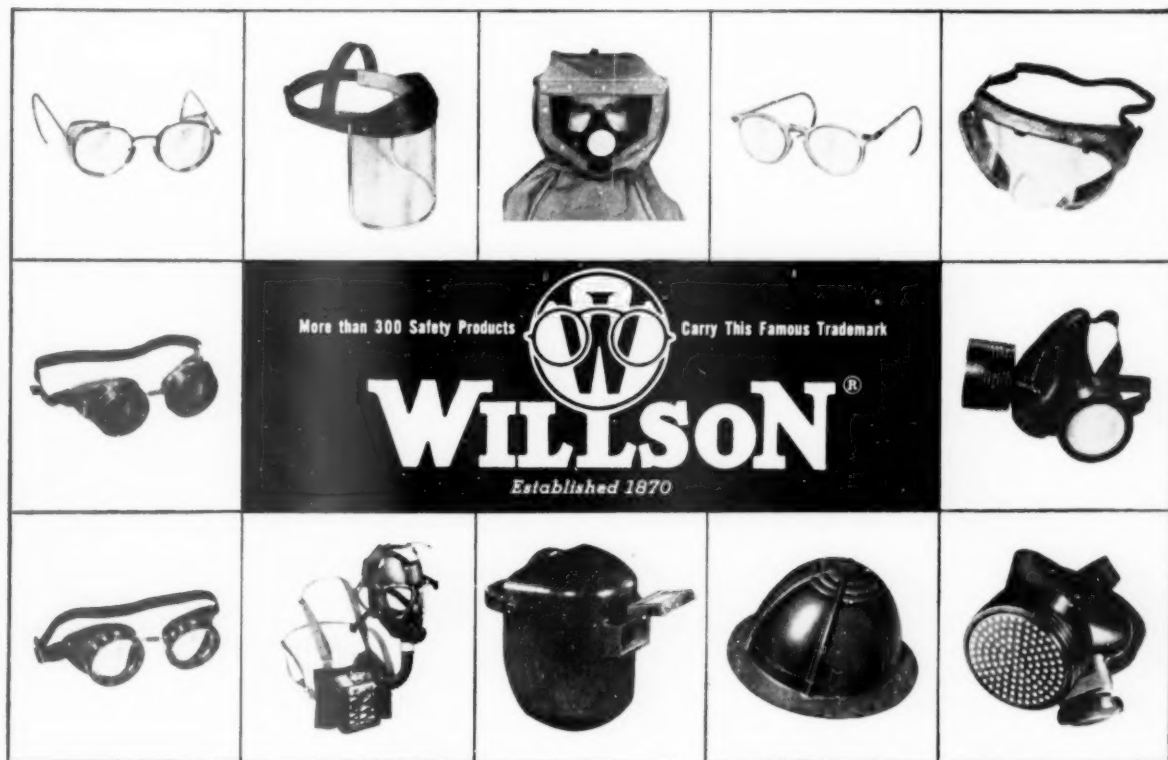
74 Willson Distributor outlets with more than 400 salesmen offer speedy local

ALBUQUERQUE, N. MEX.—Hendrie & Bolthoff Co.
ATLANTA, GA.—Fulton Supply Co.
BALTIMORE, MD.—Carey Mach. & Sup. Co.
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BOSTON, MASS.—Cutter, Wood & Sanderson Co.
BUFFALO, N. Y.—American Allsafe Co.
BUTTE, MONT.—Montana Hardware Co.
CASPER, WYO.—Casper Supply Co.
CHARLESTON, S. C.—Cameron & Barkley Co.
CHARLESTON, W. VA.—Safety First Supply Co.
CHATTANOOGA, TENN.—C. D. Genter Co.
CHICAGO, ILL.—Protective Equipment, Inc.
CINCINNATI, OHIO—The E. A. Kinsey Co.
Orr Safety Supply Co.

CLEVELAND, OHIO—Safety First Supply Co.
COLUMBUS, OHIO—The E. A. Kinsey Co.
DALLAS, TEXAS—Engineering Supply Co.
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--the most complete line
safety equipment--
TO GET ANYWHERE!



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Handclasp of a friend-in-need

There's confidence in the very "feel" of the world famous C-O-TWO Squeeze-Grip Carbon Dioxide Type Fire Extinguishers. The quick-acting "Squeeze-Grip" fits your hand naturally like a handclasp...hangs right...carries right...works right. You're in complete command of the situation instantly...no fumbling...no fatigue.

From the non-conducting, shatterproof discharge horn to the high strength, durably finished cylinder, you get top quality construction that results in a lifetime of satisfactory service. Because of the very few working parts and corrosion resistant materials throughout, the total cost to you over the years is less than other initially lower priced makes...fire after fire, recharge after recharge, without trouble.

It's not hard to see, when you fully compare and try, why C-O-TWO Squeeze-Grip Carbon Dioxide Type Fire Ex-

tinguishers are your best buy for killing flammable liquid and electrical fires, as well as some surface fires involving ordinary combustible materials. Sizes range all the way from 2½ to 100 pounds capacity...all fully approved by the Underwriters' Laboratories, Inc., Factory Mutual Laboratories, Armed Forces and Government Bureaus.

With C-O-TWO Squeeze-Grip Carbon Dioxide Type Fire Extinguishers the penetrating carbon dioxide is a clean, dry, non-damaging, non-conducting, inert gas...smothers fire instantly, leaves no after fire mess...harmless to equipment, materials and finishes...even food is still perfectly edible.

Act now for complete free information on these first-rate, sure-acting fire extinguishers. Remember fire doesn't wait...get the facts today!



MANUFACTURERS OF APPROVED FIRE PROTECTION EQUIPMENT

Squeeze-Grip Carbon Dioxide Type Fire Extinguishers
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Built-In High Pressure and Low Pressure Carbon Dioxide
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Which suits your safety needs best?



FERROX

You get low-cost coverage with Ferrox, 40 feet to the gallon . . . costs $\frac{1}{3}$ as much as fabric-backed floor coverings. Goes down fast, too. Just open the can and trowel it on. Ferrox provides non-slip grip . . . resists oil, chemicals and weather conditions. Especially suitable for concrete floors in washrooms, ramps, platforms, around machine areas or wherever there is a shipping hazard.



FERA-MAT

Resin bonding agent and diamond-hard mineral granules give Fera-Mat long life. Its extra traction minimizes lost motion and fatigue. Fera-Mat covers large floor areas in a hurry. It peels like adhesive tape, installs quickly and stays safe! Especially applicable for clean, smooth floors where speedy installation is required.



FERALUN

Made of cast iron matrix, Feralun treads and thresholds have a diamond-hard abrasive in the walking surface. And for a tough floor job that never needs maintenance, ask about Feralun floor plates, too. Architects, safety engineers and building owners know that Feralun takes toughest punishment. Proof? Millions of feet of long-lasting treads and floor plates are on the job all over the nation. What's more, Feralun is economical because it lasts for the life of the building.

THESE THREE top-quality safety flooring materials and treads are problem-solvers. Each is designed for specific job requirements. Each has been proved in thousands of installations. *Don't slip up on safety!* Write for American Abrasive's Fact Folder on Safety Floorings.

VISIT OUR BOOTH 114
and get all the facts

**AMERICAN
ABRASIVE**

Safety Floorings

AMERICAN ABRASIVE METALS CO., 460 COIT ST., IRVINGTON, N. J.

IF YOU THINK THAT ARE ALIKE ... WE'VE

Let's be frank about it . . . in the past, First Aid Kits haven't shown the continuing improvement recorded by almost every other item of safety equipment . . . so we did something about it!

We "put the finger" on every place where modern design, latest quality control, color keying, careful material selection, and improved manufacturing tech-

niques could produce First Aid Kits that would serve you BETTER.

Then we went right ahead and MADE these improvements. Many of the changes are small in themselves, but they add up to a BIG DIFFERENCE. We'd like to prove that we have something BETTER—something that you don't want to miss!

NEW PRODUCT PROTECTION . . .

Added Quality Control Methods give you Pharmaceutical thoroughness!

So you can be sure of purity, freshness, sterility, we have a system where every Unit "D" box "signs in" and is permanently stamped with a number. This Quality Control

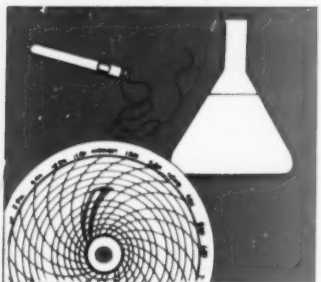
number identifies the pedigree, clear back to our every operation, and gives you assurance of unit responsibility down the line. Our Quality Control numbers maintain date identity—outgoing materials are FRESH.

Sterilization gets the full treatment! All compresses and dressings are sterilized in their Unit "D" boxes. A recording



thermometer makes a permanent record of temperature and length of exposure. A tell-tale glass vial rides in the center of every batch during sterilization, and confirms, by change of color and consistency of the powder it contains, that the purifying steam has penetrated to every Unit "D" box in the oven. Check samples are sent regularly to a commercial

testing laboratory for bacterial analysis. The chart and vial are marked with a control number, then filed. This control number is stamped on the boxes in the batch . . . another step in our program of improved, responsible protection for you.



THE NEW LOOK . . .

A dressing-up that pays off in convenience, use!

Our new approach extends to every phase

even color! The New Blue gives a clean, distinctive, and attractive appearance to the metal case and Unit "D" boxes. A hard-wearing surface of baked enamel resists grease, dust. New, too, are the simplified instructions and illustrations on many of the Unit "D" boxes. And our new packaging program meets the latest labeling requirements of the U. S. Pharmacopeia and the Food and Drug Administration.



THE CASE with the built-in extras

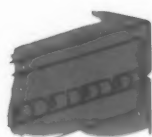
Every detail of the M.S.A. engineered-and-designed case serves you better! Typical is the lid construction that meets the base of the case flush, about three-quarters of the way up the sides of the Unit "D" boxes with no overlapping top to complicate handling or storage. Open the lid, and you'll notice that the Unit "D" boxes extend free above the top of the base. Here's "finger-room" for quick, accurate selection and easy removal of the desired treatment . . . no digging-down.

Our case gasket doesn't give moisture or dust a chance! It's made of tubular rubber, sits securely and permanently in a strong metal channel around the inside of the base. The gasket's tubular design adds extra pressure, more contact surface, when the lid is closed truly, an all-weather feature.

Our wall-mounting brackets prove again that it's the little things that make the



ALL FIRST AID KITS GOT NEWS FOR YOU!



BIG DIFFERENCE. The top edge of the mounting bracket is bent at right angles for greater strength. Another point—the brackets are in the center of the case—better balance, more support!



Deserving of honorable mention are (1) the nickel-plated spring locks, (2) complete contents sheet that gives clear, easily followed instructions, and (3) the stop-hinge that holds the lid in rigid shelf-position when wall mounted.

FEATURES that give our complete first aid material line a bonus value

Our "do-it-better" program moved in on a number of items! Visual Swab Applicators are one example. The tips are *gauze*—being less absorbent, gauze gives you maximum utilization of the antiseptic and no loose fibers to catch on tissue. Each type of antiseptic has its own distinctive color label for immediate and positive identification. This color keying gives you a constant visual check against misuse.

Our Ammonia Inhalants, containing pure, uncolored solution, are wrapped in specially treated covering which

turns brown upon detection of any leakage. The Inhalants are tested on an open tray for two weeks before final packaging.

You'll find "extras" in our Ammonia Ampoules, too. A thin blue fracture-line on the glass vial gives you a clean, quick break. All vials are hermetically sealed. Each vial comes in a protective cardboard sleeve, properly identified. As an added precaution, the identification is also printed on the *actual glass vial* as a safeguard against its misuse in case the sleeve is lost.

New modern equipment has been installed for filling and sealing tin tubes of Burn Treatments and Eye Ointments. Tubes lithographed with product identity and instructions are used for many of these treatments. Tubes also carry the Quality Control number stamped on the closure.

And what about selection of First Aid Materials? You name them—we've got them. Four sizes of kits with standard contents and more than 70 different items, in complete size and style ranges, are standing by to meet your particular needs!



THERE'S NO DOUBT ABOUT IT . . . the M.S.A. All-Weather First Aid Kits in their new dress are something you don't want to miss! And this **NEW LOOK** applies to all sizes—10, 16, 24 and 36 Units! But seeing is believing . . . so call your nearest M.S.A. representative **NOW**.



Call the M.S.A. man on your every safety problem . . .
his job is to help you



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B R E C K

FOUR WAYS TO PROTECT SKIN FROM INDUSTRIAL DERMATITIS

BRECK pH7 PROTECTIVE CREAM protects the hands against irritants such as lubricating oils, cutting compounds, tar, greases, rubber dust, aromatic and hydrocarbon solvents, fiberglass, paint and iron dust. It forms a non-sticky, invisible film over the skin. Breck pH7 Protective Cream is easily applied. It is easily removed with Breck Hand Cleaner or soap and water.

BRECK WATER RESISTANT CREAM protects the skin against the action of water and water solutions such as liquid coolants, emulsified cutting oils, mist and spray from alkali baths and plating solutions, cement and lime. It covers the skin with a light, protective film which is not slippery or sticky. Breck Water Resistant Cream has a pH value of 8.

BRECK HAND CLEANER helps eliminate the use of harsh, gritty, highly alkaline or defatting hand cleaners. It does a thorough cleansing job, yet is mild and non-irritating to the skin.

BRECK WORK CREAM is used after exposure to degreasing materials and at the end of a day's work. It substitutes fatty materials for the natural skin oils which have been removed. In this way Breck Work Cream helps keep the hands smooth, pliable and lubricated.

A Breck Industrial Preparations Booklet



will be forwarded to you upon request.

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FLAMMABLE LIQUID FIRES SNUFFED OUT IN SECONDS WITH MODEL 50-S ALFCO CARBON DIOXIDE WHEELED ENGINES

Lighter in weight, faster in operation, more easily serviced than the heavier model it succeeds, the Series 4, Model 50-S Alfeo Carbon Dioxide Wheeled Engine is a one-man fire killer of Class B and C blazes too big for hand portable extinguishers.

It is a trim, streamlined engine, stronger in construction with excellent balance in wheeling position. With a shorter cylinder, but slightly larger in circumference, the center of gravity is lowered and the ease of maneuverability for one-man operation is greatly increased. With a minimum of bulk, it has everything needed for fast and efficient fire-fighting.

The Model 50-S may be operated in an upright or lowered position. The cylinder valve may be opened before or after the hose has been uncoiled at the scene of the fire, but the squeeze lever-type valve on the horn should not be operated until ready to extinguish the fire.

The Model 50-S engine discharge horn is equipped with the exclusive Alfeo Anti-Statik Device, to insure complete safety in combating electrical blazes.

Model 50-S is approved by Underwriters' and Factory Mutual Laboratories
Write to have salesman call or for illustrated literature.



Model 50-S
Series 4
For Class B
and C Fires

Engines Models 100 and
75 are available also

Our 2nd Century
of Leadership in
FIRE PROTECTION

AMERICAN-LA FRANCE-FOAMITE
ELMIRA-NEW YORK-U.S.A.
In CANADA, LAFRANCE FIRE ENGINE & FOAMITE LTD., TORONTO



YOU ARE CORDIALLY INVITED TO VISIT OUR BOOTHS, Nos. 116 AND 117

National Safety News, October, 1953

TWOFOLD PROTECTION:

*The Man Who
Selects It...The
Man Who Wears It
Can Count On*

**AO SAFETY
EQUIPMENT**

With today's vastly increased compensation costs, plant safety has become a more serious matter than ever before. The job of the Safety Director becomes daily more important. The need to safeguard workers (and their output) with *the best means available* has become the basic function of specialists.

To these specialists, AO offers safety equipment that will never let them down in terms of protection and serviceability. To the workers who wear this equipment, AO offers a security and peace of mind which can never be measured in dollars and cents alone. To both groups AO offers the satisfaction of knowing that there is no better safety equipment made per safety dollar expended.

AO's COMPLETE line of safety glasses, clothing, gloves and respirators can save you money, lost man hours and lost production in your plant. These products do the job — and do it well — for *every* job, every time. Your nearest AO Safety Products Representative can *prove* it to you.



If you need safety glasses . . . AO, the world's largest manufacturer of optical equipment, is headquarters. Yes, and you'll find leadership here evidenced in over twenty types of safety glasses—each meeting a need of industry. Spectacle type FUL-VUE . . . cup type . . . welders' eyewear . . . wide-angle vision models . . . heat-treated glass or plastic, or special air conditioned models . . . AO has them all.



If you need respirators . . . AO can simplify the protection problem (and inventories) with respirators that are quickly, easily converted from gas to dust types and vice versa by interchange of cartridge or filter. You pay for one face mask yet can obtain the protection of seven or eight respirators for combating a multitude of dust and chemical fume hazards. Double or single cartridge models.

AO's Industrial Vision Program increases production, decreases accidents. Write today for booklet "Improved Industrial Vision" to 53 Vision Park, Southbridge, Mass.

American Optical



SAFETY PRODUCTS DIVISION

SOUTHBRIDGE, MASSACHUSETTS

BRANCHES IN PRINCIPAL CITIES



If you need protective clothing or gloves . . .
 You'll find them at AO in horsehide, cowhide, asbestos, neoprene latex and flame-resisting duck . . . comfortable, long-wearing and tailored for the job. Here, from one source of supply, is *dependable* protection in coats, jackets, leggings, spats and pants . . . in aprons and sleeves . . . in gloves, mittens, hand pads and finger guards. Check your needs now.



SEE US AT BOOTHS 79, 80, 81, NATIONAL SAFETY SHOW

ONLY HY-TEST GIVES YOU THESE



1

DUPONT DACRON STITCHING FOR ALL-ROUND RESISTANCE!

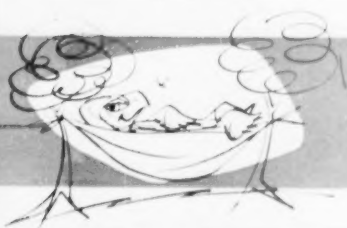
Now HY-TEST adds another "longer-wear" feature... tough, durable DACRON stitching. Incredibly stout... amazingly resistant to acids, alkalis, bleaches, common solvents, mildew, bacterial action, moisture and perspiration. DuPont's DACRON polyester fibre in all Neoprene sole shoes!



2

ANOTHER LONGER WEAR FEATURE! NEOPRENE HEELS!

DuPont's Neoprene Heels on all leather sole shoes! For longer, tougher year! Resists heat... oils and grease... and abrasive wear. Neoprene wears like iron... even when tested on foundry floors.



3

ANOTHER FEATURE! RELAXING NEW "ARCH-EZE"!

An amazing comfort feature that makes walking a pleasure. Less jolt! Less shock! Perfect comfort for the foot and arch that cuts work-fatigue materially!



4

ANOTHER FEATURE! HEAT RESISTANT SHOE FOR HOT MILL WORK!

An exclusive new construction that insulates the foot from heat without sacrificing longer wear. Unique midsole protects from heat. Tough, durable Neoprene outsole for longer wear.



5

ANOTHER FEATURE! TOUGH, FLEXIBLE BOL TAN INSOLE!

Durable Bol Tan virtually eliminates perspiration damage to the insole. Stays soft and pliable months longer... even under the most grueling conditions. Twice the wear in every pair! A new pair and money refunded if Bol Tan deteriorates from perspiration conditions.



6

ANOTHER FEATURE! TOUGH, BUT GENTLE ISCONAP ONE-PIECE LINING!

One-piece nap lining that won't come loose... bunch up to cause blisters... or rub skin raw. Permits the active foot to breathe! Retards perspiration rot and mildew. Shoes retain their good looks longer... wear better!



7

THE LONGEST LINE OF SAFETY SHOES IN AMERICAN INDUSTRY!

A shoe to fit every job... every foot... every personal desire; because HY-TEST is the most complete line of safety shoes in American industry! Heat resistant shoes, oil-resistant oxfords, shoes and boots, exclusive Anchor-Flange and Anchor-Flange Winguard austempered steel toes... you choose them all from one complete line when you choose HY-TEST.

7

OUTSTANDING FEATURES IN SAFETY SHOES!

**FEATURE FOR FEATURE
VALUE FOR VALUE
YEAR AFTER YEAR . . .**

HY-TEST PIONEERS THE WAY TO GREATER FOOT SAFETY IN AMERICAN INDUSTRY

- DACRON • BOL TAN • NEOPRENE
- ISCONAP • ANCHOR FLANGE

Time after time . . . HY-TEST has the features that make safety-shoe history. Repeatedly, HY-TEST adds the tremendous new exclusive features that have made it the most complete . . . the most purchased safety shoe in industry. This is shoe-making at its best! The best leathers, the most advanced techniques, the most skilled craftsmen! All combined in America's outstanding safety shoe . . . HY-TEST! Nowhere else . . . absolutely nowhere . . . can you find the same skill and quality, or the exclusive features you find in one line when you look to HY-TEST. If safety shoes were custom-made, you still couldn't beat these HY-TEST quality features. Regardless of style . . . of sizes . . . of special features, HY-TEST has everything the worker needs! And has it the way he wants it! So . . . now! In your plant . . . look to the safety shoe proven by popularity and sales! Look to HY-TEST! Write today for your free catalog . . . or visit us at Booth 95 in Chicago . . . October 19 thru 23rd.



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Fast, Immediate Delivery!
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LONGEST LINE OF SAFETY SHOES
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HY-TEST



SAFETY SHOES

★ TRADEMARK REG. U. S. PAT. OFF.

**Insure Workers' Feet
in Sure
Protection**



THE WORLD'S LARGEST SELLING SAFETY SHOE

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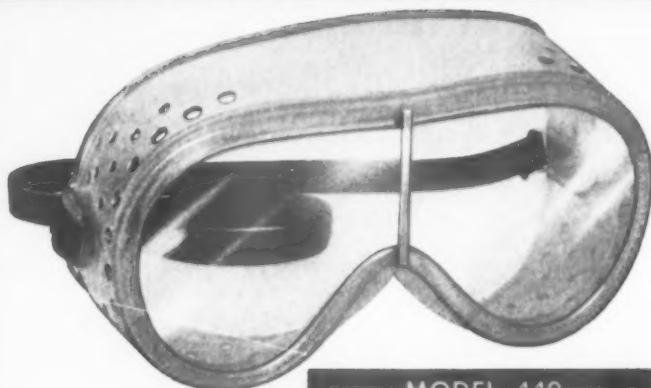
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YOU GET COMFORT PLUS BETTER EYE PROTECTION



Shatterproof METHACRYLATE LENSES ARE SAFER

Eye-Savers exclusive methacrylate lenses never shatter or splinter with impact, do not pit from sparks. Clear and colored lenses absorb 96 to 100% of all harmful ultra-violet rays. Green lenses absorb sufficient infra-red for complete protection from a weld arc three feet away.



MODEL 440
with Methacrylate Lens
FOR HEAVY IMPACT



SOFT VINYL FRAME — FITS OVER LARGEST PRESCRIPTION GLASSES

Extra-soft plastic frame with soft nose flange form-fits snugly, yet comfortably, around facial contour . . . closes the gaps around nose and cheeks.



EXTRA WIDE REPLACEABLE LENS

The optically perfect, shatterproof methacrylate lens provides full protection against the heaviest impact. Lens is extra wide for picture-window vision.

Improved metal lock bar holds lens tightly in frame. Frame acts as bumper to prevent scratching lens when laid face down.

MODEL 441 with Acetate Lens FOR LIGHT IMPACT



Contains all the features of Model 440 except the lens is laminated acetate — optically perfect — light and comfortable to wear.

VENTILATION AND COLOR STYLES

Available with *standard ventilation* shown in Model 440 (above) or *screen ventilation* shown in Model 441 (left) or *no ventilation*. Lens colors: Clear or light, medium and dark green.

CHEEPEE



This low-cost, one piece acetate goggle provides safe, light-weight, comfortable eye protection. Exceeds federal specifications. Available in clear or medium green.

METHASPEC Model 55



Here is a low cost, shatterproof methacrylate eye shield, ideal for a visitor's goggle. Easy lens angling and Retrax temple adjustments assure perfect fit. Available in clear or light or medium green.

Quality Eye Protective Equipment

Made by the Leaders in: Plastics



WATCHEMOKET OPTICAL CO., INC.

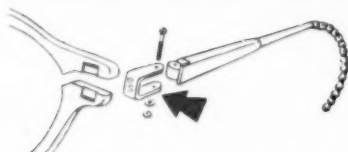
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QUALITY AT LOWER COST WITH THE EYE SAVERS LINE!



SPLIT-JOINT Model 80
for Plano or Prescription



SPLIT JOINT SPREADS APART FOR EASY LENS REPLACEMENT

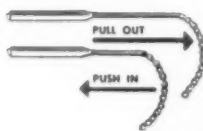
No need for special heaters. A simple operation, and lenses are quickly removed and easily inserted. All parts are standard and replaceable at low cost.

DOUBLE NOSE-BRIDGE DESIGN GIVES EXTRA STRENGTH

Bridge fits comfortably ON the nose at the geometric center between the eyes. No adjustment is needed. One size eliminates extra stock.

TWO FRAME SIZES AVAILABLE to hold 45 x 48 mm and 42 x 44 mm standard safety lenses. **RETRAX TEMPLES** shown below are standard.

EYE SAVERS "RETRAX" TEMPLES are easily adjusted to fit any head.



All Eye-Savers Spectacles are available equipped with new, light weight plastic Retrax temples that telescope in or out for perfect fitting. Plastic "ball-chain" hook design fits comfortably over the cartilage in back of ears and is self ventilating.

TUC-AWAY Model 415
for Lightweight Comfort



90% PROTECTION THAT'S WORN 100% OF THE TIME

Tuc-Away featherlight design is easy to wear ... comfortable and attractive. Shatterproof, optically perfect, methacrylate lenses provide safe protection. Universal nose-bridge fits every face.

THREE LENS STYLES EASILY REPLACED:

Snap-out, Snap-in



All methacrylate lenses absorb 96 to 100% of harmful ultra-violet rays. Available in clear or infra red absorbing light, medium or dark green.

Available in lens styles shown below.



SEMI-CUP LENS
for side and bottom protection



FULL 1" SIDE SHIELD
for complete side protection



REGULAR SIDE SHIELD
for minimum side protection

RETRAX TEMPLES are standard on the Tuc-Away. Model 415 (Plastic Retrax) Model 412 (Metal Retrax). Also available with club temple Model 410.

Obtain complete details from your nearest authorized **EYE SAVERS** Jobber or write direct. New catalogs and prices are now available.

Quality Eye Protective Equipment

Made by the Leaders in Plastics

				WATCHEMOKET eye SAVERS				
"SPLIT-JOINT" PLASTIC FRAMES	"TUC-AWAY" SNAP-OUT LENS	"METHASPEC" EYE SHIELD	LOW COST ONE PIECE		VINYL FRAME FORM-FIT	MOLDED CURVED	MOLDED SQUARE	HEAVY DUTY FACE SHIELD

WATCHEMOKET OPTICAL CO., INC.

In Canada: Levitt-Safety Limited, Toronto 10, Montreal 1

222 West Exchange St.
PROVIDENCE 3, R. I.

THE HIGH STYLE LINE.....

Iron Age *"Commander"*

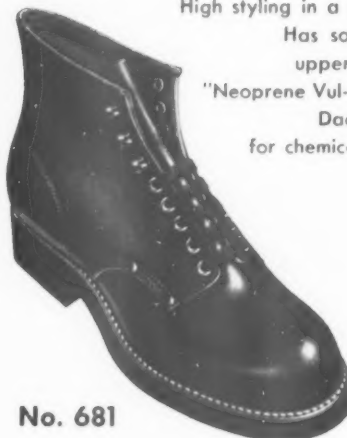
A smart plain toe smooth leather brown safety oxford with "Leatherplus" outsoles. Has a sweat-proof leather insole, an Armstrong cork filler and Winguard steel toe box. Stitched throughout with Dacron. Full leather lined.



No. 622

Iron Age *"Work Horse"*

High styling in a plain toe high shoe. Has soft, brown horsehide uppers with leather lining, "Neoprene Vul-Cork" sole and heel, Dacron stitching. Ideal for chemical workers or where oily conditions are found.



No. 681

Iron Age *"Skee-Bo"*

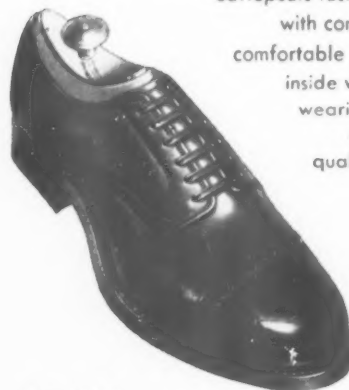
Patterned after a rugged Swiss Ski Boot, this is the longest wearing safety shoe ever made. Has double layer of leather at vamp and counter, rawhide lacing and Seiberling oil proof sole and heel, dacron stitched. Color is a distinctive brown tone.



No. 680

Iron Age *"Saftopedic"*

A dressy brown blucher oxford embodying Saftopedic last and construction with combination fit. Has comfortable arch cushion and inside wedge heel, long wearing "Leatherplus" outsoles and first quality rubber-heels.



No. 921



The Safety Shoe For Industrial America

Iron Age *Steel Toe*

IRON AGE DIVISION, H. CHILDS & CO., INC.

Reasonably Priced

WHAT'S INSIDE EVERY IRON AGE SAFETY SHOE BOX?



Pick out a pair of Iron Age safety shoes from any box at random. What do you see? First, you'll admire the high styling that is really the trade mark for the entire Iron Age line. Smart appearance sells safety shoes to workers . . . boosts your coverage. Iron Age safety shoes sparkle with it. Now take a closer look at these shoes. Note the rich sheen, feel the suppleness of those plump leather uppers. Iron Age uses only the best grade hides, the finest tannages. Of course, you'll recog-

nize the nationally advertised outsoles. And inside these shoes you'll find a multitude of quality features . . . important details in design and workmanship that mean greater comfort and more foot miles of shoe life. Finally, check the cost and prepare to be surprised. For Iron Age safety shoes with all their custom quality features are priced competitively. If you would like to have an eye-opening demonstration, an Iron Age representative is as close as your phone — or write us and he will see you.

Iron Age *"Milady"*

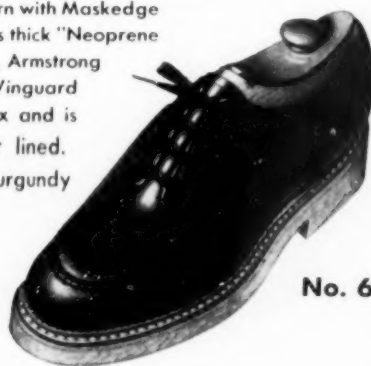
A smartly styled white oxford with brown saddle and back stay that will catch the eye of any woman. Offers full protection of a steel safety toe. Has "Neo-Cork" oil resistant sole and heel.



No. 606

Iron Age *"Cruiser"*

Built on the attractive, comfortable Klomp pattern with Maskedge last. Features thick "Neoprene Crepe" sole, Armstrong cork filler, Winguard steel toe box and is fully leather lined. Distinctive burgundy color.



No. 625

SAFETY SHOES

PITTSBURGH 12, PA.

Write for complete catalog showing over 40 styles

heading the safety parade!



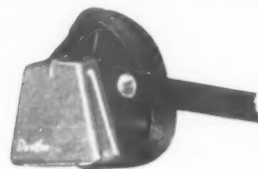
**SEE OUR
BOOTHs 61 & 62
NATIONAL
SAFETY
CONGRESS**

**FROM HEAD
TO FOOT**



MCDONALD SAFE-T-HAT

Worn by more workers than any other safety hat! Tougher, radial-ribbed crown—fully suspended aluminum shell in two sizes.



**MCDONALD DUSTFOE
No. 55 RESPIRATOR**

Captures harmful dusts by new electrostatic principle. Weighs less than 3 oz. complete.



B.F. MCDONALD CO.

Manufacturers and Distributors of Industrial Safety Equipment

1255 Howard St., San Francisco 3 • 5721 W. 98th St., Los Angeles 45 • 3745 Greenbriar Dr., Houston 6

The complete McDonald safety line includes equipment for head, eye and respiratory protection—first aid materials—safety clothing—safety instruments and safety appliances.





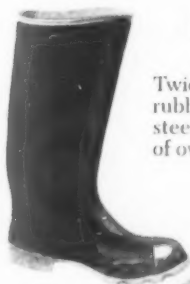
McDONALD PROTECTIVEST

Protects against flying metal particles shot from high speed milling and cutting machines. Stops a .38 caliber bullet fired at only 8 feet. Light (less than 3 lbs.) and only $\frac{1}{8}$ " thick—made of laminated glass-cloth.



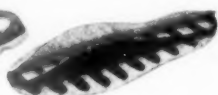
SAFETY GOGGLES

A complete line of quality goggles, precision-made and sturdily built for maximum vision security.



McDONALD SAFETY BOOT AND INSOLE

Twice the foot safety! This fine rubber boot has rugged built-in steel toe—plus—flexible insole of overlapping steel strips.



McDONALD DOG BITE KIT

Emergency first aid treatment for utility workers, meter readers, etc. Plastic kit contains plastic bottles of liquid soap and antiseptic, sponge, adhesive bandages, instructions.



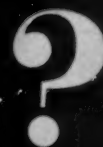
McDONALD FIRST AID KITS

All sizes, all types. Kanister Kit (left) mounts anywhere, ideal for outdoor use. Unit Kit (right) available with 10, 16, 24, or 36 complete first-aid treatments.

McDONALD AIR SUPPLIED HOOD



Safety no smart worker does without! Three rugged, full-vision models give protection against harmful dusts, shot and grit, lead fumes. Fool-proof air volume control.



WHO'S HICKEY?

Be sure to
see him at our
BOOTHS 61 & 62



for authoritative answers to safety...ask the manufacturer hard ones!



THIS ONE'S A DILLY—an all-felt, plastic-bottomed "Parka" boot developed to prevent frostbite common in mines and lumber camps. 7-layer toe construction includes aluminum foil liner that reflects body heat and acts as vapor-barrier. To be worn with rubbers, or 4-buckle arctic in deep snow.



MUCKER—a brand new type of steel-toe safety work boot developed by Lehigh for engineers, oil field workmen and all others who get into muck and sludge. Levis or regular pants can be tucked inside or worn outside. Loose fitting top is cooler, easier than laced-up boots.



HIGH WIRE ARTIST—specially designed for linemen. Built up heel hooks the pole step—steel plate and extra leather wedge under the arch keep feet from going to sleep on narrow rungs. Note extra flap at instep to resist scraping against pole; ease pressure of climbing spikes.

Perhaps we can help you. See us at

the easy problems in foot who has solved most of the

BOOTH 87

NATIONAL SAFETY CONGRESS



SPORT SHOE? Try and tell this one from any ordinary crepe-soled oxford! But the sole is Neoprene crepe that resists oil, grease, heat and abrasion, and inside is steel toe that withstands impacts up to a ton. Your men will like this smart way to save on two-in-one shoes for dress and work.



BRILLIANT YELLOW TOE CAP identifies this shoe in atomic energy plants so it can't be worn outside dangerous radiation areas. A simple change to adapt one of Lehigh's most popular work shoes to a highly specialized industrial hazard. What's yours?



TOO WET FOR SHOES—TOO HOT FOR BOOTS? Creameries, dairies, packing plants needed an in-between safety shoe for wet-floor departments. So Lehigh came up with this light-weight, ankle-hugging boot that keeps feet dry and safe—helps to prevent bone-breaking skids and falls.

MSCO provides you with a burn spray kit



◀ New Unit Type
Burn Spray Packet
WITH PRESSURE CARTRIDGE SPRAY
(Fits all standard unit
kits—Requires six spaces)
NO. 1030



◀ New Complete
Burn Spray Kit
WITH AEROSOL DISPENSERS
NO. 1010



▶ Handy Wall Unit
WITH AEROSOL DISPENSER
NO. 1035-3



for every need ...

**Quick—Thorough—Painless—Sanitary First Aid ...
on-the-spot! The largest assortment of
burn spray kits ever offered**

DOCTORS AGREE that certain basic principles or conditions are present in all cases of burns. The "first aider" is qualified only to deal with the first three: Relieve Pain—Prevent Infection—Treat Shock.

Spraying the burns is the quickest, most painless, sanitary, and thorough way to accomplish these three very important points involved in first aid treatment. Following this, the application of sterile dressings must be made when necessary, in order that the patient reach the doctor in the best possible condition for medical treatment. Consult your medical director concerning the type of medication he prefers for first aid treatment of burn cases.

The wide MScO assortment of Burn Spray First Aid Kits provides the utmost in flexibility of medications, method of spray application, and price. *All are designed to complement the unit system of first aid.*

COMPACT NEW UNIT-TYPE PACKET (No. 1030) lets you economically combine your burn spray first aid requirements with your standard unit-type first aid kits.

This six-unit size MScO packet provides a practical pressure cartridge spray gun (with Americaine or Kip Antiseptic Oil in pressure cartridges) and 10 refill cartridges containing the burn solution. *Packet fits any unit-type first aid kit.*

NEW, QUICK-ACTION AEROSOL DISPENSERS are among the several outstanding features of the new MScO complete Burn Spray Kit (No. 1010 and No. 1035-3).

The No. 1010 incorporates the utmost in convenience and completeness of contents. Contains 25 units of various sterile bandages and burn first aid items. New pull-out drawer contains four 11-ounce Aerosol dispensers supplied with either Americaine or Kip Antiseptic Oil.

MScO also provides a new Handy Wall Unit (No. 1035-3) with Americaine or Kip Antiseptic Oil in Aerosol Dispenser for use in boiler rooms, furnace rooms, etc. where limited first aid is required. Other types of MScO Burn Spray Kits are shown at right.

SEE YOUR COMPANY MEDICAL DIRECTOR, discuss your burn first aid problems with him. Proper first aid will save him time and save the patient needless pain. Clinical data covering burn solutions furnished in MScO Kits available on request. Also, should your medical director desire a burn first aid solution not mentioned here, MScO will provide laboratory tests for your company to determine compatibility of the solution to various metals, containers, valves and propellants. Write for facts on MScO Burn Spray First Aid Kits.



*it pays to buy
from Medical Supply*

Medical Supply Company

ROCKFORD, ILLINOIS • IN CANADA, IT'S SAFETY SUPPLY CO.

National Safety News, October, 1953



**A flower
for your buttonhole
...every day!**

**visit Booth 138 at the
Safety Congress ...
to get your fresh "mum" daily
and meet**

your MScO distributor

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ARTESIA, N. M.—Union Supply Co., Inc.
ATLANTA, GA.—Guardian Safety Equipment Co.
BIRMINGHAM, ALA.—Safety Engineering & Supply Co.
BUFFALO, N. Y.—American Allsafe Co., Inc.
BUTTE, MONT.—Montana Hardware Co.
CARLSBAD, N. M.—Union Industrial Corp.
Carlsbad Supply Co.
CHARLESTON, S. C.—Cameron & Barkley Co.
CASPER, WYO.—Union Supply Company
CHATTANOOGA, TENN.—C. D. Genter Company
CHICAGO, ILL.—Protective Equipment, Inc.
CINCINNATI, O.—Williams & Company, Inc.
CLEVELAND, O.—Williams & Company, Inc.
COLUMBUS, O.—Williams & Company, Inc.
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KANSAS CITY, MO.—Safety Incorporated
LITTLE ROCK, ARK.—Fire Appliance & Safety Co.
LOS ANGELES, CAL.—Dickson Safety Products
Guardian Safety Equipment Co.
LOUISVILLE, KY.—Ori Safety Equipment Co.
MEMPHIS, TENN.—Safety Service Co.
MIAMI, FLA.—Medical Supply Co.
MILWAUKEE, WIS.—Protective Equipment, Inc.
NEW YORK, N. Y.—Whitaker & Higgins
NORTH HOLLYWOOD, CAL.—Swift Laboratories, Inc.
OMAHA, NEB.—Anderson Fire Equipment Co.
ORLANDO, FLA.—Cameron & Barkley Co.
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PHOENIX, ARIZ.—M. B. Houghton Co.
PITTSBURGH, PA.—Williams & Company, Inc.
PORTLAND, ORE.—J. E. Haseltine & Co.
RICHMOND, VA.—Southern Medical Supply Co.
ROCHESTER, N. Y.—Rochester Safety Equipment Co.
ST. LOUIS, MO.—Safety Incorporated
SALT LAKE CITY, UTAH—Universal Safety & Fire
Equipment Co.
SAN DIEGO, CAL.—Emergency Airs Supply
SAN FRANCISCO, CAL.—Brenton Equipment Co.
SAVANNAH, GA.—Cameron & Barkley Co.
SEATTLE, WASH.—J. E. Haseltine & Co.
SPokane, WASH.—J. E. Haseltine & Co.
SUNDRIW, TEX.—Union Supply Company, Inc.
TAMPA, FLA.—Cameron & Barkley Co.
TOLLEDO, O.—Williams & Company, Inc.
TULSA, OKLA.—Guardian Safety Equipment Co.
TORONTO, ONT.—Safety Supply Company
Branches in Edmonton, Halifax,
Montreal, Trail, Vancouver, Winnipeg

**60 Distributors with Local Stocks
Throughout the United States
and Canada.**



Pronounced EM-ESS-CO.

**Medical Supply Company
Rockford, Illinois**

PENOPTIC

The Most Talked About New Name In Safety



in every level of industry...
at every time of day.....
..somebody's talking about

PENOPTIC

PENNSYLVANIA OPTICAL COMPANY

READING, PENNSYLVANIA

Known For Fine Ophthalmic Products Since 1886



Our Best **PENOPTIC** Ad Is

The Quality of The Products Themselves

Penoptic products are manufactured and distributed by the Pennsylvania Optical Company . . . one of America's foremost producers of fine ophthalmic goods since 1886. These sixty seven years of experience, as applied to the production of Penoptic safety products, makes them quality leaders in the safety equipment field. You can order Penoptic safety products direct, for better service at a substantial reduction in cost of worker protection to you, the purchaser. And by dealing with the manufacturer you enjoy a closer association with the people who are directly responsible for product performance.

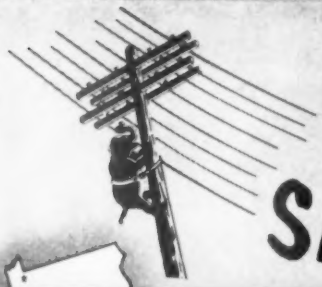
See Them, Test Them, Price Them at **BOOTH 202**
at the **NATIONAL SAFETY CONGRESS!**

PENNSYLVANIA OPTICAL COMPANY

READING, PENNSYLVANIA

Known For Fine Ophthalmic Products Since 1886

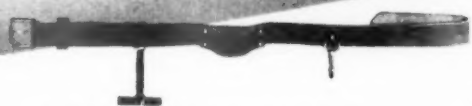




Miller SAFETY PRODUCTS



MADE IN FRANKLIN • SOLD EVERYWHERE



No. 6119—Latigo leather electrician's tool belt 1½" wide. Tool loop, tape holder and snap are standard attachments. Weight 9 ozs.



No. YL—Made from two thicknesses of Yellow Latigo leather and sewn from end to end with hot waxed linen thread, this 2" safety strap is "tops".



No. 93 2½—Chocolate Elk and Oak Harness leather body belt rates high for service and long wear. 5" maximum width tapered to single bar dee rings. Solid construction yet very light weight.



No. 6131—Heavy canvas line hose bag with sturdy leather bottom is 7" diameter x 48" deep. Reinforced fibre top sleeve and 3" leather reinforcement up sides from bottom. Treated rope handle.



No. 21W—Roomy bolt and nut bag made from sturdy webbing. Reinforced edges and angle supported corners.



No. 10—Made from water repellent duck, the Miller rubber glove bag is equipped with snap button cover and snap in back for fastening to body belt.



No. 4ES—Latigotan Harness leather holster with Russet leather pockets riveted to the back. Belt loops fit ordinary trouser belt.



No. 077—Wide bottom canvas bag with leather reinforcement strips in top, both front and back.



No. 146-P—Insulated Blue Blade screwdriver with ¼" drop-forged blade, 6" long. Plastic is molded directly to the shank, providing great safety and serviceability. Another Miller original.



No. 700—Heavy canvas tool bucket with tough leather bottom. 12" diameter x 15" deep. Fibre top ring and leather reinforcement 2" up sides. Treated rope handle.

a Miller original



U. S. Pat. No. 2520808

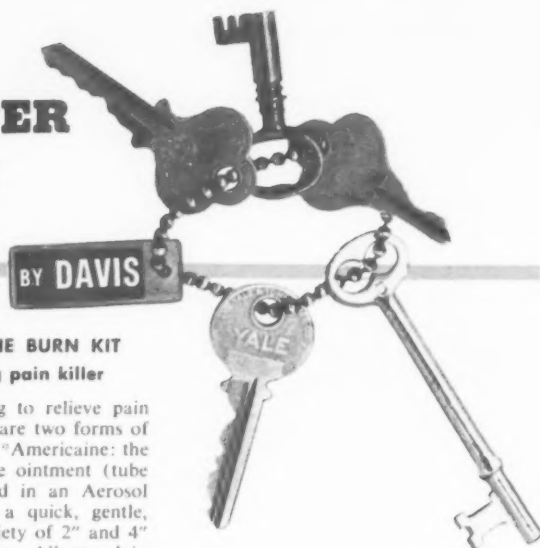
Make your pliers safe with Miller non-slip, non-explosive insulating plier grips molded in three sizes to fit all pliers.

Miller equipment is designed for safety, made for long wear, and worn with comfort. Miller products are favorites everywhere for assured safety, economy, and high quality because Miller leads where safety is first. New, colorful catalog showing complete line will be sent upon request.



Miller EQUIPMENT CO., 18 Miller Ave., Franklin, Pa.

5 NEW KEYS TO GREATER INDUSTRIAL SAFETY



DAVIS AMERICAINE BURN KIT with the amazing pain killer

The kit with everything to relieve pain from a burn. Included are two forms of the antiseptic pain killer "Americaine": the greaseless, water soluble ointment (tube and jar) and the liquid in an Aerosol Dispenser . . . sprays a quick, gentle, pain killing liquid. Variety of 2" and 4" bandages and compresses. All stored in a red steel Davis Kit.

Write for Bulletin #324

COMBINATION WELDING SHIELD AND HEDGARD double safeguard action

A one-piece DAVIS molded fibre or plastic welding shield. Attaches to Hedgard Model F with special quick coupling. Shield and Hedgard easily separated, and Hedgard can be worn independently.



Write for Bulletin #1407

DAVIS PLASTIC ADHESIVE BANDAGE flexible, inconspicuous

The unrestricted, flexible movement bandage. Colored to match your skin—hence less conspicuous. So thin, so lightweight you do not feel it on a finger joint. Water and oil resistant.



Write for Bulletin #322

DAVIS PLASTIGLAS HEDGARD the safety hat your men will want to wear



The air-circulated, crack-proof, sun-proof, rain-proof safety hat. Resists 40-pound impact, electric shock, dripping fluids, and immune to moisture. Features style and comfort. Universal cradle—one hat fits all head sizes and shapes. Special brim protects back of neck.

Write for Bulletin #1407



DAVIS WINTER LINER meets all cold weather needs

A cap made of strong cotton twill and lined with cotton flannel for comfort and warmth. Especially made for cradle type Hedgard. Ear flaps attach to cap lining by snap tabs. Adjustable cotton or elastic chin straps can be attached to ear flaps by snaps. Cap can be worn apart from ear flaps.

Write for Bulletin #1407

The Complete Davis Safety Line

FIRST AID

Unit Dressing (D Carton) System
Tannic Acid Jelly for Burns (Tannoid)
Cotton-lined Gauze Compress
Self Adhering Gauze Compress Bandage

GAS SAFETY EQUIPMENT

Light Colored Rubber Compound for Masks

Inhalators and Resuscitators with removable breathing bag, cylinder and pressure reducing valve
Neoprene Coated Airline Hose
Hose Masks

GAS ANALYSIS

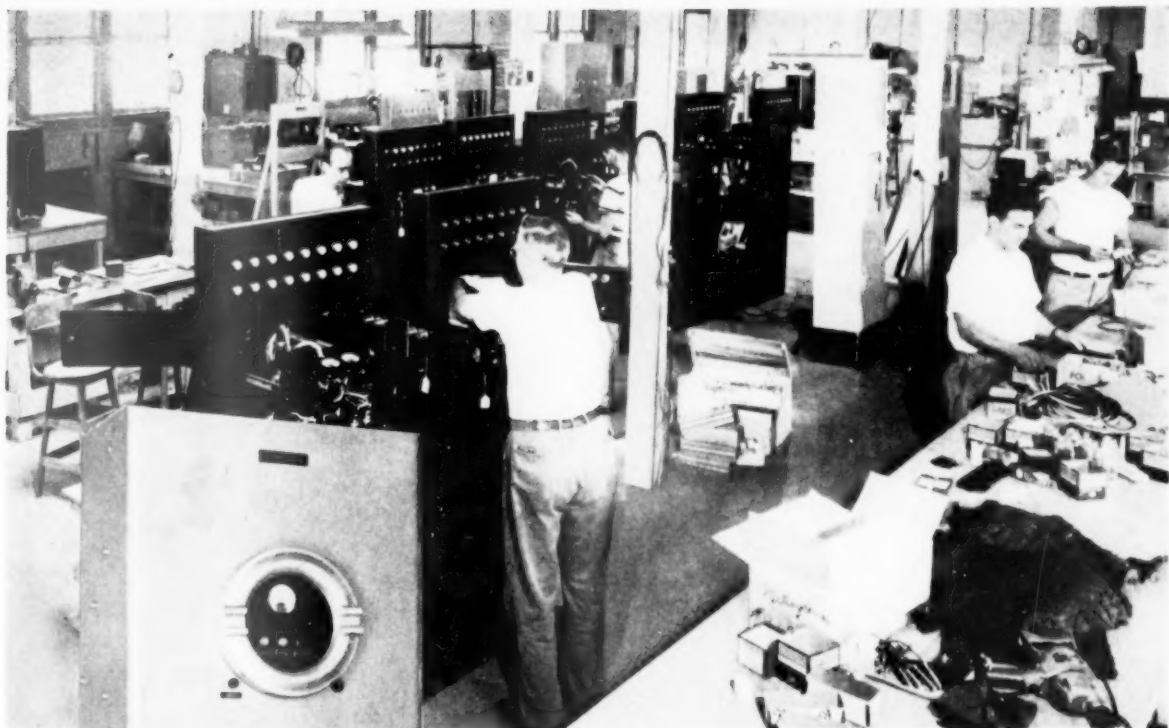
0-100% Gas Analyzer
Gas Alarm Systems
Portable, Toxic and Combustible Gas Indicators

Booths 75-76

CONRAD HILTON HOTEL, Chicago, Illinois
October 19 to 23



DAVIS EMERGENCY EQUIPMENT **CO., INC.**
55 Halleck Street, Newark 4, New Jersey



Explosion-Proof
Tube Sampling
Gas Alarm System

DAVIS GAS ANALYSIS SYSTEMS FOR EVERY INDUSTRIAL APPLICATION

REMOTE HEAD SYSTEM

Continuous combustible gas analysis, recording and alarm system covering one or many points.

TUBE SAMPLING SYSTEM

Economical protection for 3 to 12 different locations where continuous analysis is not required.

EXPLOSION-PROOF SYSTEM

Alarm systems for Class I, Group D areas.

SEMI-PORTABLE UNITS

Complete and accurate analysis, with or without alarm and recording features, in a movable housing. Also, hand units.

The Davis line of Gas Analysis and Alarm Systems has been designed to provide industry with dependable, accurate instruments to meet every requirement in protecting lives, property and processes against toxic and explosive gases and vapors. Davis units are tailored and installed to provide maximum performance in each specific application. Literature on the complete line will be sent gladly upon request.

Booths 75-76 — CONRAD HILTON HOTEL, Chicago, Illinois
October 19 to 23

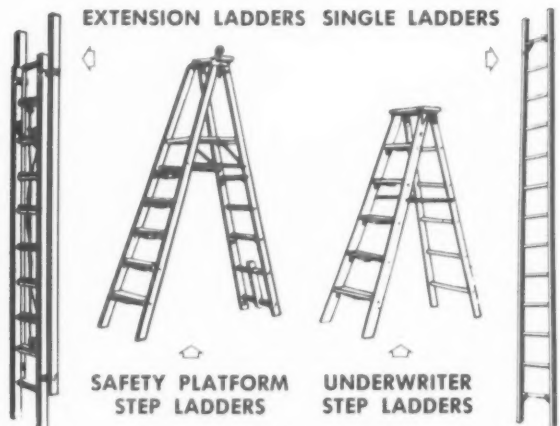
DAVIS INSTRUMENTS
Division of **DAVIS** EMERGENCY EQUIPMENT **CO., INC.**
55 Halleck Street, Newark 4, N. J.

Gold Medal LADDERS SCAFFOLDING

... by the leaders in the scaffolding industry!



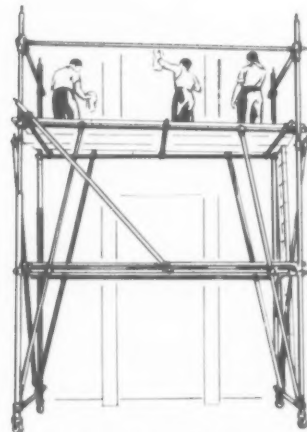
**GOLD MEDAL
SAFETY EXTENSION TRESTLES**



GOLD MEDAL LADDERS
(Also Magnesium Ladders)



**"TROUBLE SAVER"
SECTIONAL STEEL
SCAFFOLDS**
(Fixed or Rolling)



**GOLD MEDAL
TUBELOX ROLLING SCAFFOLD**

See Our Exhibit at the **NATIONAL SAFETY CONGRESS**
CONRAD HILTON HOTEL, CHICAGO, OCTOBER 19 TO 22, 1953

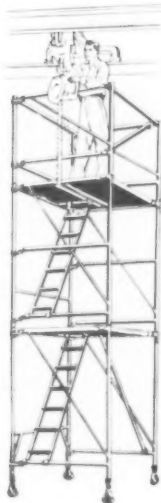
VISIT BOOTHS 98 and 99

Members of our staff will be on hand to welcome you and discuss your scaffolding problems.

ALUMINUM

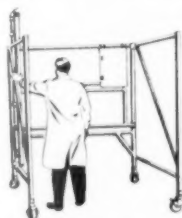
SCAFFOLDS

... for the leaders in industrial safety!

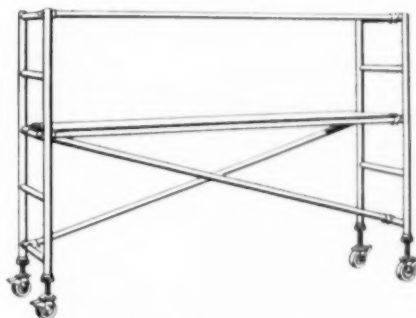


**New
FOLD-A-WAY
SCAFFOLD**

Speedy, folding scaffold for one man handling and erection. Sketch below shows erection of base section with man standing within base area. Standard aluminum intermediate and top sections may be used with Fold-A-Way base.



ALUMINUM ROLLING SCAFFOLDS
also available

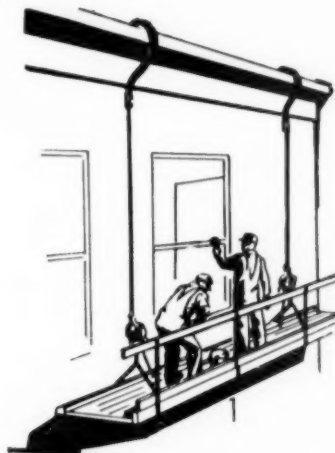


SECTIONAL LADDER SCAFFOLDS

STEEL
or
ALUMINUM



TUBELOX SCAFFOLDING



SWINGING SCAFFOLDS



For Greater Safety . . . Efficiency . . . Economy

THE PATENT SCAFFOLDING CO., Inc.

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Branch Offices in Principal Cities Across the Nation

PAINTING**CLEANING****ELECTRICAL WORK****INSPECTION****REPAIRS**

Save 5 Ways Safely...

on Maintenance Work with

"TROUBLE SAVER" SECTIONAL STEEL SCAFFOLDING

Simplify plant maintenance. "Trouble Saver" Steel Scaffolds assure greater economy and safety.

Scaffolding erecting and dismantling time is sharply reduced.

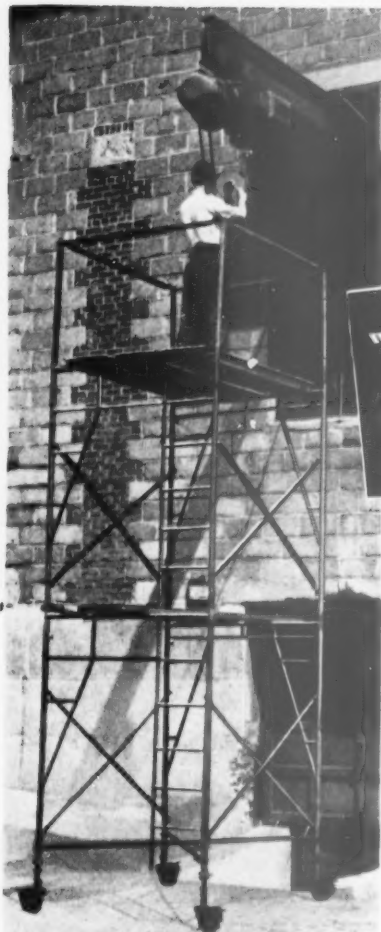
Men do more and better work on firm, safe scaffolding.

You protect workers against costly accidents.

Less labor is required for any job.

Convenient, efficient scaffolding cuts material waste.

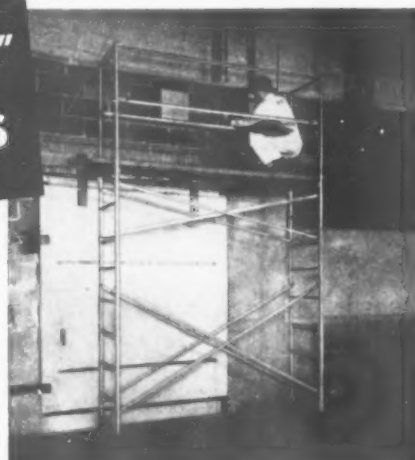
"Trouble Saver" Scaffolding is available in types and sizes for every maintenance need — indoors or outside. Write for Bulletin PSS-24 and Catalog M.



"TROUBLE SAVER" Rolling Scaffolds

Left: A typical "Trouble Saver" industrial rolling scaffold, equipped with casters, used for repairs and painting.

Right: "Trouble Saver" LADDER SCAFFOLDING — can be quickly put together from ladder units, 3', 5', 6'-6" or 10' high. Extension bases, 3', 4' or 5' wide are used for working at greater heights.



"TROUBLE SAVER"
Adjustable
STEEL TRESTLES



● SAFE
● STRONG
● ECONOMICAL



Details of the quickly adjustable "Trouble Saver" Steel Trestles.

VISIT OUR EXHIBIT
at the
National Safety Congress
Conrad Hilton Hotel, Chicago
October 19 to 22, 1953
Booth 97

The Steel Scaffolding Company, Inc.

856 Humboldt Street

Dept. NSN

Brooklyn 22, New York

Telephone: EVergreen 3-5510

National Safety News, October, 1953

"We've reduced our scrubbing time from 70 to 7 man-hours ... and our floors have never before been so clean!"

— says Foreman of
BURNY BROS. BAKERY, CHICAGO



Garage and stockroom floors in Burny Bros. large, modern bakery get daily scrubbing with a Job-Fitted Combination Scrubber-Vac and Setol Cleanser

THEY'RE an unbeatable team to speed the cleaning of oily, greasy floors. Here's why: A Scrubber-Vac completely mechanizes scrubbing. It applies the cleanser, scrubs, flushes if required, and damp-dries the floor—all in one operation! Job-fitted to specific needs, a Scrubber-Vac provides the maximum brush coverage consistent with the area and arrangement of the floors. Its teammate, Setol Cleanser, is specially designed for the greater speed of combination-machine-scrubbing... emulsifies grimy oil and grease instantaneously for fast, thorough removal by the machine's powerful vac. Moreover, Setol retains its strength longer than average alkaline cleansers. This, too, speeds the cleaning process... saves on materials... and cuts operating

time of the machine, which in turn reduces labor costs. The Scrubber-Vac shown above is Finnell's 213P, for heavy duty scrubbing of large-area floors. It has a 26-inch brush spread, and is capable of cleaning up to 8,750 sq. ft. per hour! Finnell makes sizes for small, vast, and intermediate operations (available on lease or purchase plan)... also a full line of fast-acting cleansers. In fact, Finnell makes everything for floor care! Find out what you would save with combination-machine-scrubbing. For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 2210 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.

FINNELL SYSTEM, INC.

Originators of Power Scrubbing and Polishing Machines



**BRANCHES
IN ALL
PRINCIPAL
CITIES**

A Steel Toe for every

Safety Box Toe Company truly makes a steel toe for *every* safety purpose . . . safety steel toes for work, semi-work, dress, semi-dress, women's and rubber footwear . . . all in a range of styles, sizes and widths. From two busy fabricating plants, both fully equipped with every needed skill and technical facility, flow millions of steel toes to meet the ever-increasing demand for toe protection in this country and foreign markets.



The inside story of safety toes has been one of constant progress, from the original Munson type hammered out in an old New England blacksmith shop to the present day styling in toe profiles. Not only have profiles changed but safety features as well. Modern steel toes are *precision* built and tomorrow's trends are anticipated in today's engineering.

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HAS NOW PASSED THE
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53 progressive safety shoe manufacturers throughout the United States and Canada now *specify* WINGUARDS for their dress and work type footwear.

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GROWING VOLUME *and*

REPEAT BUSINESS...

PAX



A steadily mounting volume of orders based upon a solid foundation of repeat business from large and small customers alike is concrete proof of customer preference for PAX. This preference has been built by rigid adherence to the principles of **SAFETY, SATISFACTION, QUALITY and ECONOMY** incorporated into every pound or gallon of PAX Products.

Safety

PAX Granulated Industrial Skin Cleansers are noted for their safety. This is the quality most difficult to achieve and maintain in a skin cleanser. The danger of harshness is obvious but mildness alone is no guarantee of safety. A mild skin cleanser that does not work efficiently not only leaves harmful irritants on the skin but drives workers to use dangerous solvents and other make-shift cleaning methods. PAX Skin Cleansers' ability to achieve high cleansing efficiency while maintaining mildness is one of the strongest reasons for continued customer preference.

Satisfaction

Worker satisfaction with PAX is demonstrated by the thousands of unsolicited letters praising PAX that come from workers everywhere wanting to buy PAX for their own use. This is of extreme importance. Worker dislike of a skin cleanser, for any reason, will result in their neglecting to use it. The management pays in lost time, medical bills and compensation claims when neglected washups lead to Industrial Dermatitis.

Economy

The end cost of a skin cleanser in use is the only practical way to measure economy. PAX Granulated Skin Cleansers consistently prove to be lower in actual cost than competitive products, even those initially priced at much less per pound. Put in PAX for a six months' test. You'll be gratified at how much money you save—plus improved performance.

When you specify any PAX Product you get as an extra dividend the experience, ability and special know-how of our PAX Research and Testing Laboratory, acquired through more than a quarter-century of continuous research and development.

G. H. PACKWOOD MFG. COMPANY

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prove CUSTOMER PREFERENCE FOR

GRANULATED SKIN CLEANSERS AND OTHER PAX PRODUCTS

Quality

Your assurance of constant high quality is the PAX system of laboratory control of production. Quality at a reasonable price is guaranteed by PAX volume. Volume selling of PAX Skin Cleansers and other PAX Products makes possible volume buying of materials, volume production methods and volume distribution. All of these mean quality at a reasonable price to you.

PAX Products are distributed nationally through PAX Warehouses and Jobber Stocks. Ask us for the name of your nearest distributor.



PAX-LANO-SAV Heavy Duty Granulated Industrial Skin Cleanser has been awarded the Seal of Acceptance of the Committee on Cosmetics of the American Medical Association.



THESE PAX PRODUCTS GIVE YOU MORE FOR YOUR MONEY

PAX-LANO-SAV HEAVY DUTY Granulated Skin Cleanser. The Aristocrat of All Granulated Skin Cleansers. Unmatched for fast, thorough cleansing ability and kindness to the skin. The largest selling brand of all skin cleansers in the industrial field. There is also a complete line of PAX Granulated and Powdered Skin Cleansers for every requirement—priced to fit every necessity.

PAX HECTO INK SKIN CLEANSING CREAM—efficient, pleasant-to-use cleanser for quick, safe removal of hecto or other duplicator ink stains. Typewriter ribbon and carbon paper smudges are whisked away like magic!

PAX-SOLV WATERLESS SKIN CLEANSER—vastly superior to ordinary waterless skin cleansers whose soil removing properties are limited to grease and dirt. In addition to doing an excellent job on these ordinary soils, PAX-SOLV removes from the skin stains and other hard-to-remove substances that others will not. PAX-SOLV is unsurpassed in cleansing action, safety and economy.

PAX DISHWASHING COMPOUNDS for machine and hand use—establish new standards of efficiency and economy wherever they are used.

PAX DEGREASERS—powdered and liquid—will handle the toughest metal cleaning jobs better, faster, safer and at low cost.

PAX GENERAL PURPOSE CLEANERS—to meet any or all cleaning needs.

PAX OB-SER-VISION "Soap Saver" Dispensers—for powdered and granulated skin cleansers. No other dispensers offer so much in long service and money-saving features.

All product names are trade names of the G. H. Packwood Mfg. Co.

33-J

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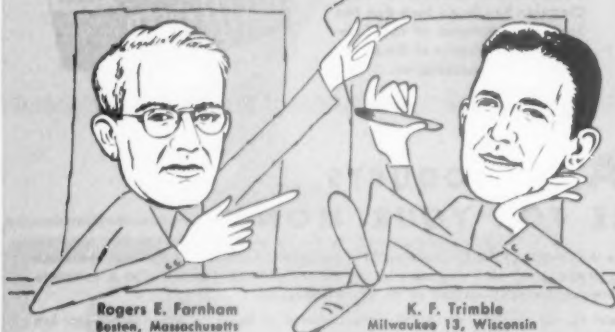


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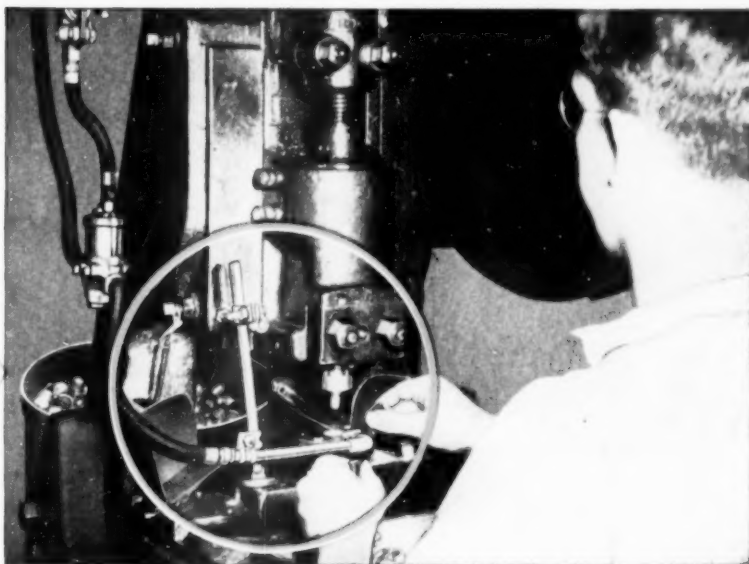
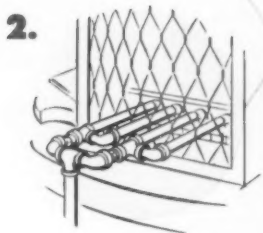
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① End slow, dangerous hand removal of work with a Schrader Air Ejection Set. Install Schrader Air Ejection Sets on your power presses—or any machines with moving parts to actuate a cam or sliding tripper. You'll find production soars—up to 100%... operator safety is boosted 50%. Replace hand removal with Schrader Air Ejection and watch your presses take a new lease on life.

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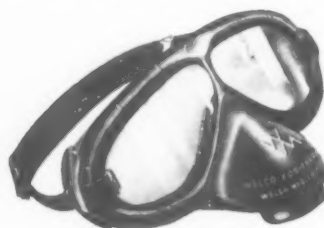
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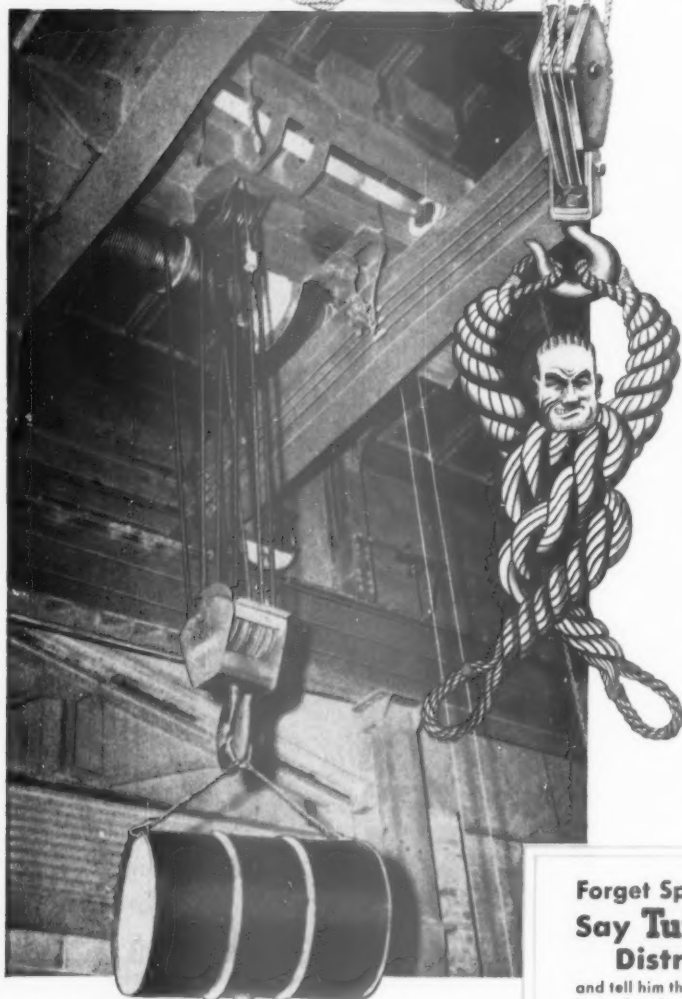
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Throughout industry where slings are used, Tuffy Slings have set high performance records. Their extra flexible, non-kinking, non-knotting, patented 9-part braided construction has in a few years made Tuffy the sling preferred by the men who work with them and the men who watch sling costs.

Many times our engineers have been propositioned to develop a hoist line which would measure up to Tuffy Slings in flexibility, wearability and extra toughness to absorb load shocks and stay on the job longer, and cut downtime and hoist line costs.

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METAL frames or ACETATE...

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—Completely dependable safety eyewear engineered to meet the most rigid tests for every job in your plant. Protection from all types of eye hazards.



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4. Employee Education Programs—Posters for bulletin boards, pay envelope inserts, other material designed to stimulate interest among workers for eye safety measures; an adjunct to your safety program.



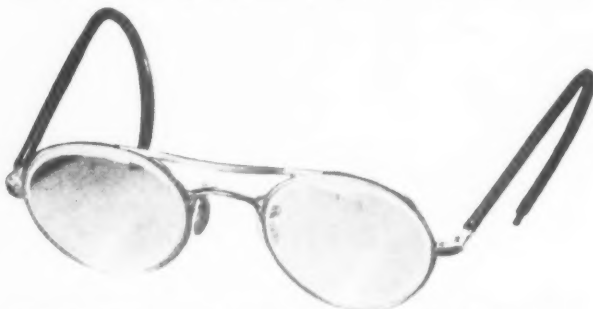
5. Occupational Vision Service—A quick, dependable method for relating visual performance of each employee to his job. The Bausch & Lomb Ortho-Rater is especially valuable for identifying accident-prone workers.

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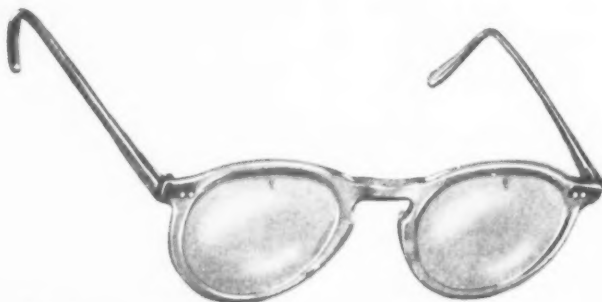


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With some eye-protection problems, a toss of a coin could determine the choice of metal frame over acetate—or vice versa. Usually, though, the job situation dictates the frame type. In any case, the degree of protection depends on the skill in the design, quality workmanship and materials. You can be sure of the quality, always, if you specify safety eyewear by Bausch & Lomb.



H-10—Non-corrosive white metal frame with rigid double bridge construction, actually lighter than its Bausch & Lomb acetate counterpart. Rugged, easy to fit. Cable temples are insulated, sweat-proofed.



Y-70—All-acetate model is ideal for workers whose skin is sensitive to metal frames. A favorite with women because with rigid temples Y-70 is easy to slip on and off without mussing hairdo. As with H-10, above, full range of bridge sizes and lens sizes. Ideal for safety lenses ground to worker's prescription. Ask for full data: Bausch & Lomb Optical Company, 90322 Smith St., Rochester, N.Y.

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There's a Pyrene for every fire hazard

HAVE YOU GOT
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VAPORIZING LIQUID

Multi-purpose extinguishers. Safe on electrical fires, effective on flammable liquid fires. 1 qt., 1 1/2 qt. pump types; also in 1, 1 1/2, 2 qt., 1 gal. pressure types.

CHEMICAL FOAM

2 1/2 gal. size produces about 22 gal. of fast-acting foam. Ideal for flammable liquid and ordinary combustible hazards. Also 10 gal. and 40 gal. wheeled units.



PUMP TANK

Shoots a continuous 45-foot stream of water or anti-freeze solution. Refillable while in operation. For fires in wood, paper, textiles. 2 1/2 and 5 gal. sizes.

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Eliminates annual recharging. For fires in wood, paper, textiles. Shoots either water or anti-freeze solution. In 2 1/2 gal. size.



Water Type

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Stainless Steel

Polished Copper

SODA-ACID

Standard protection for ordinary combustibles. Shoots a steady 40-ft. stream. 2 1/2 gal. size. For offices, factories, stores. Also made in 40 gal. wheeled units.

AIR FOAM

Couple playpipe to hose line. Every 19 gal. of water and 1 gal. of PYRENE Foam Compound yield 200 gal. of foam! For flammable liquids and ordinary combustibles.



For your own home and car
—Pyrene's new push-button
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Available from Pyrene* jobbers throughout the country. Buying from jobbers assures quick delivery, saves transportation costs. *T.M. Reg. U.S. Pat. Off.

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HOW TO PLACE YOUR SAFETY MESSAGE WHERE IT WILL DO THE MOST GOOD!

in your
employee's hands



...in his pockets



...in his home



THERE are three sound reasons why the book match is such an outstanding medium for getting your safety message noticed, read and remembered!

MOST INDUSTRIAL WORKERS SMOKE

Surveys show that the percentage of smokers among industrial workers averages about 90%. You can safely assume that at least the same percentage of your employees smoke, and that a book match is virtually a daily necessity to them—something always welcomed and never thrown away until completely used.

BOOK MATCH MESSAGES ARE READ AND REMEMBERED

The book match gets closer to and stays longer with its user than any other type of medium that could be used for your safety message. The user is ex-

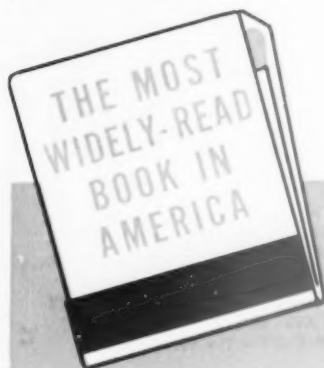
posed to the message every time he lights a match—and surveys have shown that the message on a book match is read by almost 100%, remembered by better than 35%. No other medium can equal those figures!

THE BOOK MATCH IS ON THE JOB CONSTANTLY

It is used at work and at play, at home and away. Whether an accident happens in the plant, on the highway or in the home, it adds up to the same thing: lost production. With book matches, your messages are constantly on the job—your safety campaign does not begin and end at the plant gates. In addition, a book match safety campaign is good industrial relations. The whole family will know that you are conscious of the employee's safety and welfare when book matches are used to carry your safety message!

DISTRIBUTION IS A SIMPLE MATTER

You can distribute the books at the gate at quitting time. Or you can put them in cigarette vending machines, pass them out in the cafeteria or lunchroom, give them to local restaurants, bars, filling stations, etc., or distribute them at union meetings and company social gatherings. The cost, based on a distribution of one book match per employee per working day amounts to as little as \$1.50 to \$2.50 per employee per year!



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Diamond Book Match Safety Programs*

BOOK MATCH ADVERTISING DEPARTMENT

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Then here's your hat, the world's most complete protection for electrical workers. Molded Fiberglas withstands standard 40-pound impact resistance tests. Tests 10,000 volts with a maximum leakage of 5 milliamperes. Each hat and cap is individually tested and guaranteed to withstand 10,000 volts.

10 KV CAP

10 KV HAT

Name your industry...

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—or wherever workers prefer metal safety hats. Streamlined aluminum hats are comfortable; they are the lightest safety hats made. Hard Boiled aluminum cap weighs only 10 ounces! Rugged ribbed crown construction gives them extra strength, but still retains resiliency.

ALUMINUM
SAFETY CAP

ALUMINUM
SAFETY HAT



there's a **HARD BOILED*** hat to make it safer!



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—wherever head protection is essential. Glass Hard Boiled hats, by any test, are easier to wear and greater protection! The crown of this Hard Boiled hat is so tough we had to devise special tests to measure its full ability to protect heads.

HARD BOILED HAT



HARD BOILED CAP



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Designed by miners for miners. This hat is the perfect combination of safety, convenience and comfort. Grooved crown holds lamp cord securely. Raintrough edge around hat's edge acts as pad to protect wearers' ears and neck when hat is hit. *Approved!*

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at the
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WINTER LINERS. Three types. Universal type fits all model hats, caps. Fabric exterior, down-like interior. For below zero, use in any combination with Skaters type elastic knit (shown) or Knit Skull type. Liners are fire-resistant.

Save money with Hard Boiled hats

Stock only one size. Headbands are quickly adjustable to head sizes 6 1/2 to 7 1/2. Headband can be adjusted to a perfect fit in two minutes. Hard Boiled hats are easy to issue—easy to stock and are available in your choice of color.

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Wall Grips

It's easy to see why there are so many enthusiastic Safe-Hi fans these days. An acknowledged leader in industrial safety for many years, Safe-Hi has kept abreast of progress in the field by continually incorporating the latest scientifically-tested features into its present products... by continually adding necessary new safety equipment to its product line. The Safe-Hi safety record is outstanding. Make it your safety record, too, by insisting on Safe-Hi equipment.

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Industrial Safety Belts



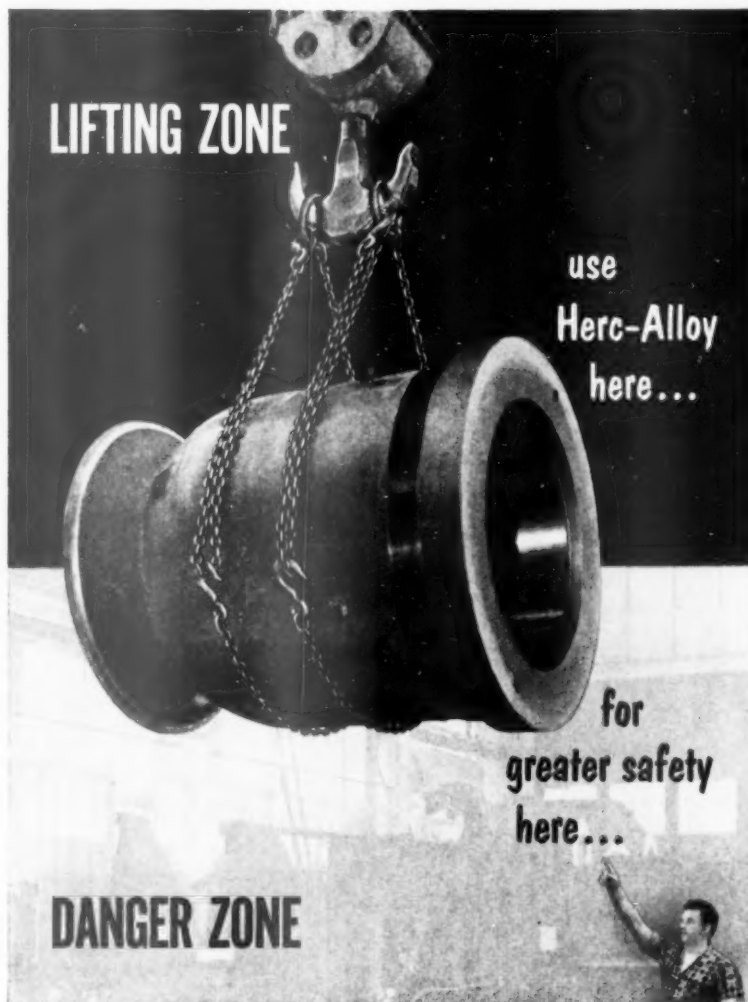
Auto Safety Belts



Chisel Grips

SEE US AT BOOTH No. 45

In plant after plant **HERC-ALLOY** Sling Chains
...in the Lifting Zone



LIFTING ZONE

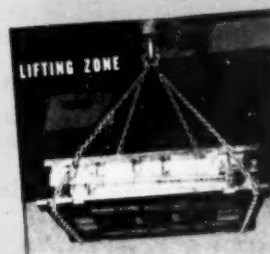
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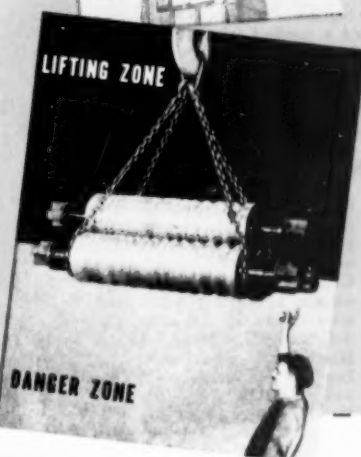
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give extra protection to
men and materials
in the Danger Zone



DANGER ZONE



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...is the
original alloy
steel chain



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In addition to an extra margin of safety, the special analysis heat treated alloy steel in Herc-Alloy Sling Chains offers two secondary advantages: One is lighter weight that reduces worker fatigue. The other is a longer life that reduces chain costs. A trial of Herc-Alloy Sling Chains in your plant will demonstrate these benefits to your complete satisfaction.



Write for
Data Book



SELLSTROM SAFEGUARDS

*Quality
Eye and
Face*

Published by Sellstrom Manufacturing Company, 626 No. Aberdeen St., Chicago 22, Illinois



Announcing the NEW Amazing SELLSTROM FIBER GLASS Welding Helmet

The Sellstrom Manufacturing Company perfected a method for using Fiber Glass to reinforce fiber to make a new material so tough, so serviceable, so long lasting, that this new No. 230 Fiber Glass Helmet should shortly be the preferred helmet wherever there is welding.

Check These Advanced Features!

1. 5 times stronger than ordinary fiber helmet. A ½ pound steel ball dropped five feet cracked an ordinary fiber helmet but merely bounced from the Fiber Glass Helmet. A ball five times this weight (2½ lbs.) went through the fiber helmet but did not even dent the Sellstrom Fiber Glass helmet.
2. Has no grain, therefore no weak spots.
3. Does not readily transmit heat. Keeps welder cooler.
4. Has elasticity to withstand rough treatment.
5. Will not readily absorb moisture, holds its shape indefinitely. (When placed in a 160 degree salt solution for 48 hours, it absorbed less than ½ ounce of moisture.)
6. The Sellstrom Fiber Glass Helmet is the lightest helmet of its kind on the market.
7. Finished in the popular black crackle.
8. Your choice of the Standard Front Loading or the "Lift Front" Plate Holder.
9. Your choice of the Standard or the Sel-O-Matic headgear.
10. Both headgears and both plate holders are interchangeable. Fit the same opening. Therefore headgear or plate holder can be changed to comply with the desire of the welder.

This helmet is so new, so wonderful, that we ask you to permit us to do you a special favor. Here is what we suggest:

Mr. Safety Engineer: Simply give us permission to forward a Fiber Glass Helmet on a 30-day memo. After using the helmet for 30 days you can decide whether you will keep it or return it. You have nothing to lose and everything to gain by such a test. We will invoice the helmet through your favorite dealer or direct.

Mr. Dealer: The interchangeability of headgears on plate holders for the new Sellstrom Fiber Glass helmet means maximum profits and minimum inventory for you.

CHOICE OF HEADGEAR AND PLATE HOLDER

The Sellstrom No. 230 Fiber Glass Helmet is available with either the Standard or the Sel-O-Matic headgear—and either the Standard Front Loading or the "Lift Front" Plate Holder.



The Standard Headgear No. WMXX

is one of the simplest to adjust. The over head band and the band around the head may be lengthened or shortened to size and are held in position by a plastic control knob at the back of the headgear. Equipped with genuine leather sweat pad and tension springs for holding helmet in any up or down position.



Sel-O-Matic Headgear

The "M" identifies this headgear on any Sellstrom helmet. (1) Can be adjusted to fit while the helmet is on the head. (2) Once adjusted, it remains secure until changed by hand. (3) Can be used with any and all styles of Sellstrom helmets. (4) The only headgear with the teeth cut in a special plastic impregnated tough vul-coid fiber, practically impervious to water or moisture. (5) The three round knob

holes give the headgear three sets of teeth and permit the headgear to outlast and outwear three ordinary headgears. (6) Equipped with a standard sweat pad, kept in place by real sweat band leather and glove fasteners.



"S" Lift Front Plate Holder

"S" always identifies the new "Lift Front" plate holder. Fits on all Sellstrom rounded helmets. It is moulded from heat-resisting Durez, with a pressed steel cover front as an extra protection if accidentally dropped. It combines light weight and strength, is absolutely lightproof. The cover plate can be changed without removing the filter plate.

Standard Front Loading Plate Holder

Combines plastic and steel lightweight construction with durability and simplicity in operation. Has no rivets. Consists of an outer and inner frame. Strong retaining spring holds plate firmly in position. Permits quick replacement of plates.

SEE the New No. 230 Fiber
Glass Helmet at the Chicago
Show BOOTH 30

You are invited to see and inspect this new Fiber Glass Helmet when you attend the National Safety Congress at the Conrad Hilton Hotel in Chicago, October 19th to 23rd inclusive. Consultant present at all times.

Your
dependable
buying guide
for more than
300 Eye and
Face Safe-
guards.



SELLSTROM
Top Quality Eye
and Face Safeguards
are Designed for

COMFORT

National Safety News, October, 1953

GREATER SLING FLEXIBILITY THROUGH

BALANCED BRAIDING

Macwhyte's Atlas Braided Slings

Atlas Braided Slings have far greater flexibility because of Macwhyte's *balanced* method of construction:

- 1) Ropes are spliced endless before braiding.
- 2) Right lay ropes balance left lay ropes.
- 3) All ropes follow uniform spiral paths, assuring balanced tension throughout the sling body.

Macwhyte's "Balanced Braid" permits fuller, safer gripping . . . no kinking . . . no spinning . . . faster materials handling.

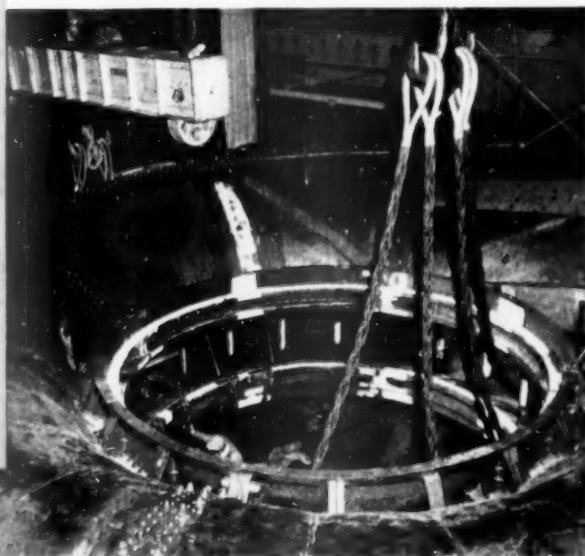
Complete line of slings for every need

Three body types are available: Atlas Round-Braided, Drew Flat-Braided, Monarch Single-Part. All are made to order in any size for any job.

Our sling engineers will be glad to study your sling needs and make recommendations promptly.



Macwhyte 8-Part Atlas Type 1 Round-Braided Wire Rope Sling



115 Ton Casing Assembly Handled with Macwhyte Atlas Type 1, Round-Braided Wire Rope Slings.

Photo courtesy
Allis-Chalmers
Manufacturing Company,
Milwaukee, Wis.

MACWHYTE SLINGS

Ask for New Circular No. 5308

Lists strengths and safe-loads for ATLAS Round-Braided, DREW Flat-Braided, and MONARCH Single-Part Slings.

For cranes and hoists specify PREformed Monarch Whyte Strand Crane Rope made by Macwhyte. Ask for Folder 50-25.



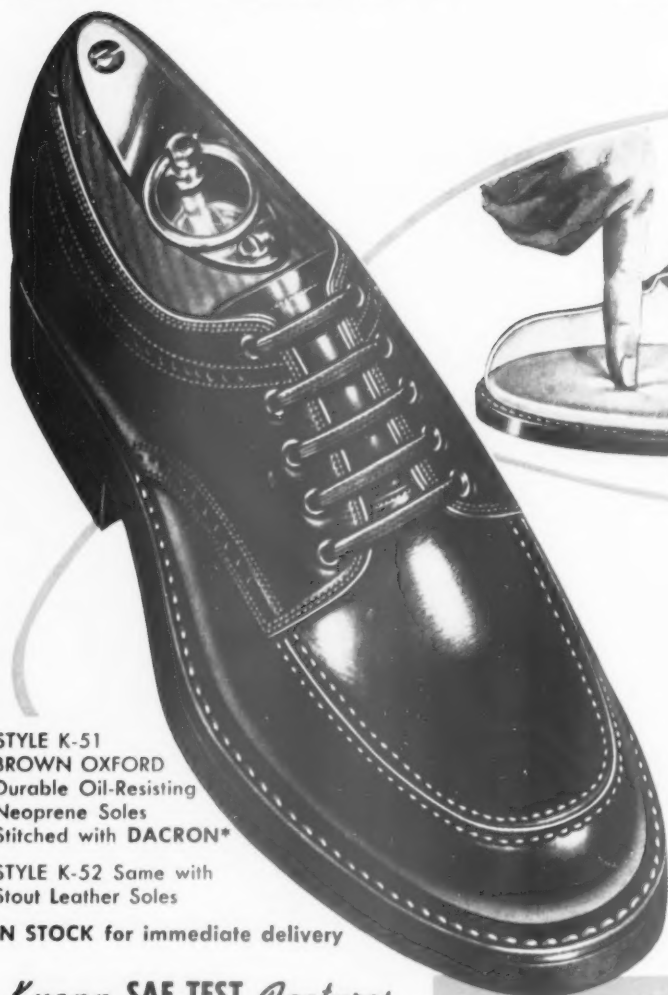
MACWHYTE COMPANY

2902 Fourteenth Ave., Kenosha, Wisconsin

Manufacturers of Internally Lubricated PREformed Wire Rope, Braided Wire Rope Slings, Aircraft Cable, Safe-Lock Assemblies, Monel Metal and Stainless Steel Wire Rope.

Mill depots: New York • Pittsburgh • Chicago St. Paul • Fort Worth • Portland • Seattle • San Francisco • Los Angeles • Distributors throughout U.S.A.

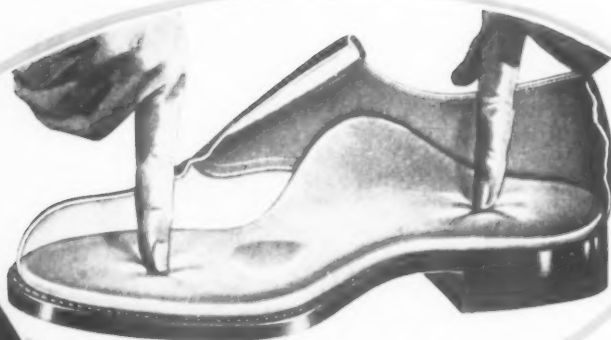
SAFETY *with* COMFORT



STYLE K-51
BROWN OXFORD
Durable Oil-Resisting
Neoprene Soles
Stitched with DACRON*

STYLE K-52 Same with
Stout Leather Soles

IN STOCK for immediate delivery



U. S. PAT NO 2,080,320

Designed for SAFETY
Built for . . COMFORT
Styled for . . DRESS

. . . . that's the story behind
Knapp Aerotred Saf-Test Shoes

Knapp SAF-TEST Features

1. Original Aerotred Cushioned Innersole
2. Positive Longitudinal and Metatarsal Arch Support
3. Austempered Steel Toe Boxes with Complete Inside and Outside Insulation
4. Specially Designed Tempered Steel Shank — Extra Wide — Extra Thick
5. Smooth, Comfortable, Non-fraying, Genuine Leather Toe Lining
6. Specially Treated 10 oz. Duck Lining — Mildew and Sweat Resistant
7. Uppers Stitched with NYLON for Extra Durability
8. Soles Stitched with DACRON* that Resists Chemical, Solvents and Caustics
9. Complete Size Range from 5 to 14 — Widths A to EEE
10. 100% Union Made
11. Guaranteed Superior Knapp Quality and Workmanship

*Du Pont Trade Mark



For full information write W. M. Partridge, Jr.,
Saf-Test Dept., Knapp Brothers Shoe Mfg. Corp.,
Brockton 61, Massachusetts.

NOW...the first safety-perfect dry chemical fire extinguisher

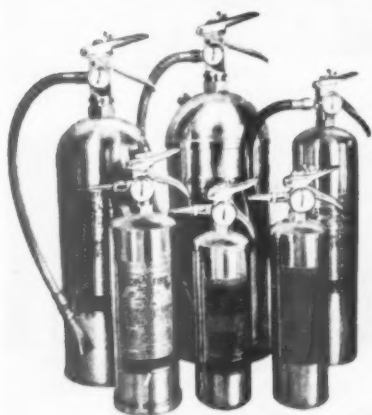
the "REDI-FLO" MARK II®

featuring revolutionary
"Spherical Valve" Design

When you squeeze the grip of the one-hand operated "Redi-Flo", Mark II, you get action—a powerful, instant flow of fire-killing dry chemical that streams out fast and freely—without fail!

With new, exclusive "Spherical Valve" Design, Stop-Fire rules out all possibility of extinguisher failure due to clogging or jamming of the valve. When fire occurs, you're never left holding an extinguisher that refuses to operate. Dry chemical particles can't possibly foul Stop-Fire's "Spherical Valve", nor can accidental distortion of the valve mechanism possibly interfere with valve operation. In fact, the "Redi-Flo", Mark II, may be partially discharged over and over—even with this "stop-go" action, it never hesitates or fails. *When you reach for the "Redi-Flo", Mark II, you KNOW it will go!*

Safety-Perfect in Every Respect—Investigate the "Spherical Valve" (Patent Pending) and the 7 other features for Safety-Perfect Performance offered by the "Redi-Flo", Mark II. Write Stop-Fire for all the facts today!



For safety-perfect dry chemical fire protection, insist on Stop-Fire's safety-perfect "Redi-Flo", Mark II!

Now available in
3, 5, 10 and 20 lb
capacities (4 lb and
30 lb units
available shortly)

Approved by
Underwriters'
Laboratories, Inc.

STOP to see STOP-FIRE
— and the "REDI-FLO", Mark II
at the National Safety Congress and Exposition
Stop-Fire Booth 407—Conrad Hilton Hotel, Chicago
October 19-23



125 ASHLAND PLACE • BROOKLYN 1, N. Y.

"Pioneer of Modern Stored Pressure Fire
Extinguisher Design"

Manufacturers of the World's Most Complete Line of Fire Extinguishers:
"Redi-Grip" Stored Pressure and "Redi-Flo" Dry Chemical Extinguishers
"Redi-Matic" Systems for Automatic Fire Protection • Foam • Soda-Acid
Water Cartridge-Operated • Carbon Dioxide • Pump Type Extinguishers



FOR HEAT AND
ABRASIVE HAZARDS—

PROTECTIVE
WHEELER
APPAREL

FOUNDED 1911

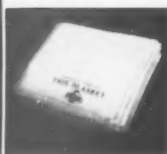
DESIGNED TO FIT THE MAN
AS WELL AS THE NEED



CLOTHING



SLEEVES



BLANKETS
AND CURTAINS



LEGGINGS



SPATS



ARM
PROTECTORS



APRONS



CAPES AND
SLEEVES



ASBESTOS & LEATHER GLOVES



HELMETS



MITTENS



HAND PADS



ASBESTOS
FIREMEN

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NATIONAL
SAFETY
CONGRESS
Booth 77

Wheeler PROTECTIVE APPAREL, INC.
Write for our new Catalog No. G9B
224 W. HURON ST. • CHICAGO 10, ILL.

WHY PAY FOR FOG?



Every time your workers stop to clear fog from their safety eye wear;
Every time safety goggles are perched uselessly on caps;
Every time a lens is scratched in cleaning;
—It costs you money.



You can eliminate this cost with K-LENS-M Liquid Method of lens cleaning. Fog that interferes with vision can steal production time all along the line wherever there is humidity, body heat or temperature extremes. K-LENS-M Lens Cleaner and K-LENS-M Anti-Fogging Liquid have proved for more than a decade to be the most effective and most economical way to combat this loss.

K-LENS-M The Acknowledged Leader in the Lens Cleaning Field

Easy to Install; Easy to Service; Easy to Use

The K-LENS-M Lens Cleaning and Anti-Fogging Station is a compact unit for efficient use by your workers. The cabinet contains the K-LENS-M Lens Cleaner; K-LENS-M lint-free Lens Tissues, with disposable space; and the K-LENS-M Anti-Fogging Liquid attachment. Endorsed by Safety Engineers. Used regularly by leading manufacturing plants, packing houses, canneries, public utilities, government installations, foundries and business offices throughout the world.

NEW Pocket-Size K-LENS-M "TwinKit"

This pocket-size, plastic "TwinKit" with K-LENS-M Lens Cleaner and K-LENS-M Anti-Fogging Liquid is ideal for off premise workers.

- o Cleans glass and plastic
- o Cleans quickly, easily; no film, no scratching
- o Most effective anti-fogging liquid—it really does a job; keeps glasses fog-free for entire work day.
- o The only complete lens cleaning and anti-fogging unit in one compact station.
- o Most economical—Lowest cost per cleaning
—Saves on replacement lens

It takes Foresight to Save Eyesight.

K-LENS-M . . . Complete Lens Cleaning and Anti-Fogging Equipment



Manufacturers
of
K-LENS-M

Liquid Lens Cleaner
Lint-free Lens Tissues
Anti-Fogging Liquid
Dispenser Cabinets
Anti-Fogging Station

THE
WILKINS
CO., INC.
CORTLAND 5 N. Y.

For demonstration, visit Booth 58, National Safety Congress, October 19-23, Chicago

Safety First

Safe-T-meter®

(PRESSURIZED)

A full line available . . . 4, 15, 20, 25 and 30 lb. sizes. Write now for complete information!



Write also for information concerning the complete line of Safety First Industrial Dry Chemical Extinguishers. Ranging in size from 5 lbs. to 30 lbs., there is an extinguisher to fit your every need.

The Sensational New Line
of Hand Portable
PRESSURIZED DRY CHEMICAL
FIRE EXTINGUISHERS
Offers Positive On-The-Spot
MAINTENANCE-FREE
Fire Protection . . .



Safety First's amazing MAINTENANCE-FREE line of Dry Chemical extinguishers! Safe-T-Meter's visual gauge, with its easy-to-read dial, requires only a glance to KNOW you have positive on-the-spot protection!

Eliminates the danger of an empty extinguisher when fire strikes! Maintenance costs not only less . . . they're gone! Servicing is necessary only when loss of pressure occurs after actual use, tampering, sabotage, or improper recharging . . . immediately detected by a glance at the gauge.

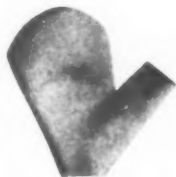
SL-5

Safety First

PRODUCTS CORP.
ELMSFORD, NEW YORK

To be safe in your Safety Apparel buys

INSIST ON STEEL-GRIP QUALITY



No. 40—HAND PAD

Tough chrome leather, open back for coolness. Also made steel reinforced. Many styles of leather and asbestos hand pads for every job.



No. 14314—OPEN END FINGER GUARD

Eliminate minor, but costly, finger injuries by using Steel-Grip finger guards on burring, grinding, buffing, sanding, assembly, machine and punch press operations. Choice of materials. Sizes for men and women. (U.S. Patents 2,351,906 and 2,461,872.)

No. 492 HALF JACKET

Chrome side split leather welder's half jacket. Made with or without detachable bib. Small, medium and large sizes. Extra large and jumbo on request. Complete line of welder's clothing, gloves and mittens.



No. 660-4—GLOVE

Steel-Grip Chrome side split leather general purpose work glove. Steel sewn throughout—practically rip proof. Thumb patched and strapped for longer wear and protection. Choice of 2" or 4" cuff.



No. W3-9 WOVEN-GARD

"Woven-Gards" are hand protectors, mitts, pads, sleeves and aprons made of a long wearing woven cotton safety material. Provide flexibility, comfort, resistance to abrasion and cutting. Highly oil absorbent. Excellent for handling oily, slippery sheets. Porous weave makes them the finest protector for handling lower temperature jobs. Excellent protection at lowest cost.



No. 225-14—ASBESTOS GLOVE

Asbestos glove, 14" length. Underwriter's 2 1/2 lb. per sq. yd. asbestos with tough chrome side split leather reinforcement over entire palm, face of all fingers, well around small finger. Thumb seam entirely away from wearing zone. Full line of asbestos gloves and mittens, plain and leather reinforced. Your choice of lined or unlined, 11", 14" and 23" standard lengths. Special lengths on request.



No. 347 LEGGING

Chrome side split leather wrap around legging. Easy on—easy off. Also made in asbestos and flameproofed duck, as well as spring type design in all materials.



DYNEL CLOTHING

Dynel chemical resistant clothing. Coats, Pants, Shirts, Laboratory Coats and special designs to order.

QUALITY alone can put maximum performance into a product. Quality alone can put real safety in Safety Apparel. Steel-Grip Safety Apparel by Industrial is all quality . . . quality of design, workmanship and materials, assuring you of complete protection, longer life . . . more for your money.

That's why for 43 years the nation's leading industrials have insisted on Steel-Grip and refused all substitutes. For none know better than they the *appearance* of safety without the *fact* of safety is the most costly and extravagant purchase of all.

You too should draw upon the 43 years of our experience in coping with *your* industrial risks and hazards. Buy Safety Apparel with the trade mark of quality . . . Steel-Grip by Industrial.

We manufacture a complete line of industrial safety apparel in your choice of leather, asbestos, asbestos, flameproofed duck, plastic coated duck, wool, Dynel and aluminum coated fabrics.

INDUSTRIAL GLOVES COMPANY A CORPORATION

1702 Garfield Street, Danville, Illinois
In Canada: Safety Supply Co., Toronto

Famous Industrial Safeguards Since 1910

*See you at
the Chicago
Safety Show
Booths 18517*

To be sure
of the Genuine

**Steel-Grip
INDUSTRIAL
Safety Apparel**

TRADE-MARK
Demand this
Trade Mark



SLINGS TO LIFT ANYTHING IN THE WORLD

Safety King

Lift King

Braided King

Economy King

Write for
our new catalog
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LOWERY BROTHERS

CHICAGO

BIRMINGHAM

PORTLAND

VANCOUVER

RIGHT IN YOUR OWN BACK YARD...

BY WEST



DERMATITIS CAN BE CONTROLLED!

How? With West's simple, inexpensive prevention and control program that... (1) makes sure of personal cleanliness (2) protects exposed skin areas (3) prevents clothing contamination (4) guards against special hazards.

Dermatitis costs industry a staggering \$100,000,000 each year. Compensation and medical care for the average case is

\$200. Plus, further hidden costs—absenteeism, replacement training, sacrificed quality, lowered morale, lost production. All, needless expense.

The WEST Dermatitis Control Program is based on an in-*your*-plant survey—made without obligation or inconvenience to you. Simply fill out and mail the attached coupon today.

WEST DISINFECTING
Company

Visit us at Booth Nos. 88 and 89
at the National Safety Congress

42-16 West Street, Long Island City 1, N. Y.

National Safety News, October, 1953

YES! We're interested in DERMATITIS Control.

- ☐ Please have a WEST representative call
☐ Please send FREE Dermatitis Control Booklet

Dept. 7C

Name _____ Title _____

Company _____

Address _____

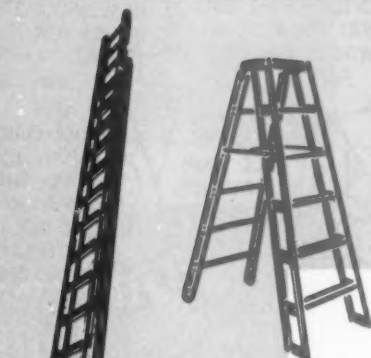
City _____ Zone _____ State _____

FREE

ALUMINUM LOUISVILLE LADDERS

Proven in service at hundreds of plants, Louisville products provide a new measure of Safety in ladder service. Gone are the problems of splinters—dryrot—loose rungs—cracked rails. Stored in—or—out of doors there's no loss in strength.

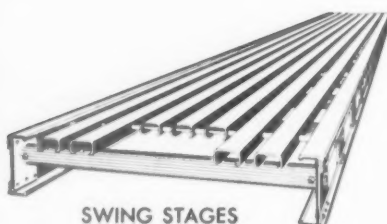
BOOTH 226



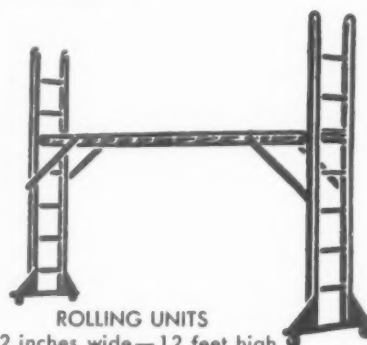
HEAVY DUTY STEPS
3 thru 20 feet



EXTENSION
2 section—
to 48 feet
3 section—
to 70 feet



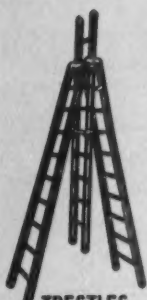
SWING STAGES
6 thru 28 feet



ROLLING UNITS
12 inches wide—12 feet high
20 inches wide—20 feet high



PLATFORMS
4 thru 18 feet



TRESTLES
18 feet
extending
to 32 feet
(max.)



A-JACK
3 thru 18 feet

A wide variety of products available with Louisville patented rung assembly . . . strong, serviceable Straight Ladders—Extensions in two and three section construction. Rolling Units for interior maintenance—Extension Trestles and A-Jacks for use with light weight Scaffold Planks—Step Ladders of the most rugged design—Platform Ladders for high work—and many others not illustrated, including:

Marine Ladders
Utility Ladders
Aircraft Ladders
Sectional Ladders

Come in and let us tell you
why—

LOUISVILLE
Safe-Height

ALUMINUM LADDERS are best.

LOUISVILLE LADDER COMPANY

1101 W. OAK ST. • LOUISVILLE 10, KY.

**Old favorite
now at a new low price
THOM McAN'S SAFETY SHOE
#S-4379**



**All these features PLUS
a full leather lining!**

You can see the good-looking style in this plain-toed oxford blucher—and the color's a real rich brown. The Winguard 400 steel toe box has a "wing" to give extra protection. Oil-treated sole and heel. And the leather lining extends throughout the shoe. A real help for longer sock wear.

Usually, when a good product is in big demand, the price either goes up or stays up! But the reverse is true of Thom McAn's Safety Shoe #S-4379. Here's a shoe so popular that rising production has resulted in falling factory costs. Our savings we pass along to you.

That's Thom McAn's way of doing business. At Thom McAn, we make our own shoes in our own factories and sell them in our own stores (or direct to plants). For better

values in safety shoes, call on Thom McAn . . . **SO GOOD** it's the best-selling shoe in all America!

SOLD 2 WAYS

1. At Thom McAn stores 2. Direct to your plant

Write today for details of this second service and Thom McAn's 4-way employee purchase plan, plus descriptions of the full line of Thom McAn Safety Shoes to . . .

THOM McAN SAFETY SHOE DIVISION
25 West 43rd Street, New York 36, N. Y.

Thom McAn . . . SO GOOD it's the best-selling shoe in all America

Thom McAn

SAFETY SHOES

A DIVISION OF MELVILLE SHOE CORPORATION

IS YOUR FLOOR **SADDLED** with an **ACCIDENT DEBIT?**

Here's what slipping Accidents do to the cost of your insurance

Workmen's compensation rates are based on the EXPECTED loss by all companies participating in your type of industrial operation—ADJUSTED to reflect the efficiency of your plant safety program. Say your rate for your industrial group is \$1 per \$100 of payroll—if your accident losses have been 23% higher than average, your policy rate becomes \$1.23. If, on the other hand, your losses drop, your rate will be lowered to 85c. Whether your floors rate a "credit" or are charged with a "debit" depends on safe floor treatment.

SEE KURL-OFF, THE SAFE, FAST, NON-INFLAMMABLE PAINT AND VARNISH REMOVER DEMONSTRATED

VISIT

Hillyard Booth #22
National Safety Congress
Hotel Conrad-Hilton, Chicago
October 19th-23rd!



Hillyard Industrial products for Safe Floors test "Slip-Resistant"



GET A FREE HILLYARD SURVEY TODAY

HILLYARD CHEMICAL CO., St. Joseph, Mo.

Please send your floor expert to make a complete survey of my plant—advise me on how to safe-treat my floors against accidents.

Name.....Title.....
Institution.....
Address.....
City.....State.....

NON-SLIP HILLYARD TREATMENTS DECREASE ACCIDENT FREQUENCY

Hillyard products for industrial floors such as Super Shine-All, Super Hil-Brite, Onex-Seal, Hil-Tex, Hilco-Lustre are specifically researched to pass tests of the nation's insurance companies far in excess of minimum requirements... provide SAFER floors under expected hazards of all plant operations in stockrooms, storage and work areas, runways, loading docks, offices, rest rooms. And, instead of involving additional labor—actually save you up to 50% in labor time.

Return Cost Credits to YOU

Because Hillyard treatments cut down on slipping frequency, your losses drop, your insurance rates are lessened. Find out how to safe-treat your floors.



St. Joseph, Mo.

"You know it's right when it comes in the checkerboard drum."





DURASPEED
RELEASE



QUARTZOID BULB
RELEASE

Features: approved by Factory Mutual Laboratories; listed by Underwriters' Laboratories, Inc. • interchangeable with conventional sprinklers • unexcelled release mechanisms.

Put out *MORE FIRE* with *LESS WATER*

TEST FIRE DRAMATICALLY DEMONSTRATES GREATER EFFECTIVENESS OF THE GRINNELL SPRAY SPRINKLERS



Test fire is under way. Under the wood crib is a torch fed by a constant flow of gasoline which prevents extinguishment of the fire. The vapors distilled off from both wood crib and gasoline torch feed the flames which lick ceiling panel.



Heat opens Grinnell up-right spray sprinklers. Flame column starts to thin out and break up under the attack of fine sprays. Water vapor from these sprays dilutes the flammable fire gases to extinguish the destructive flames.



Within 4 minutes, sprays have practically killed the fire. After 30 minutes, with torch still roasting wood crib, it was far from destroyed. Ceiling panel was only slightly flame-blackened — even though no water was directed against it.

GRINNELL AUTOMATIC SPRAY SPRINKLERS

provide:

- better protection — the greater the hazard, the greater the improvement in protection
- improved water distribution — less water puts out more fire.
- more uniform coverage — from multiple operation or from a single sprinkler
- more effective ceiling protection — without wetting the ceiling
- lowered ceiling temperatures — no unnecessary sprinkler openings

why:

- cool fire gases to prevent fire from spreading — by the faster evaporation of the smaller water droplets
- control fire by producing an unburnable mixture of flammable vapors and water vapor
- dilute and diminish supply of flammable vapors with water vapor ... evaporation of water removes heat, stops the distillation of the flammable vapors from solids — and from many liquids



Send for booklet describing Grinnell Spray Sprinklers in detail.
Grinnell Company, Inc., Providence, R. I.
Sales offices in principal cities.

GRINNELL

FIRE PROTECTION SYSTEMS

Manufacturing, Engineering and Installation of Automatic Sprinklers Since 1878

Here Are Safety Shoes That Workers Like To Wear!

SMART SAFETY SHOES STYLED BY

Safety First

It's easier to promote foot safety with these good-looking Safety First shoe styles. Employees have greater incentive to buy work shoes that double as dress shoes too! Air cushion innersoles of foam latex give exceptional comfort!

Yet, with all their smart styling and comfortable fit, Safety First shoes are ruggedly built for long wear and sure foot safety. Every pair meets the high standards of craftsmanship always maintained by Safety First—the originator of steel toe footwear.

In addition to "dress" shoes, many "work" safety shoes are included in the complete Safety First line. Write for catalog giving full descriptions and illustrating all shoe styles in color.

STYLE 5180
Tan scotch grain
wing tip brogue
oxford. Leather
sole.

STYLE 5185
Tan scotch grain
plain toe blucher
oxford. Leather
sole.

STYLE 5647
Burgandy dress
oxford, moccasin
style. Neo-Crepe
sole, oil and acid
resistant.



See all shoe styles at BOOTH 57, National Safety Exposition
Oct. 19-23.



Safety First Shoe Company

27 WATER STREET, HOLLISTON 5, MASSACHUSETTS
THE PIONEER MANUFACTURERS OF SAFETY SHOES

**"This is our last costly shutdown
because of breathing hazards**



**... Order some
Scott Air-Paks
and get those repair
jobs done in hours
instead of days"**

Ed: Right! The man hours we've already lost would pay for a carload of SCOTT AIR-PAKS. We can't afford to slow up production any longer just because our maintenance men don't have efficient breathing equipment.

S.D.: We certainly can't. It took too long to clear out the fumes so that our men could make the repairs in safety. If we had

SCOTT AIR-PAKS, our men could have gone into those fumes and finished the job in a few hours!

Ed: That's right... and our safety men tell me SCOTT AIR-PAKS can be put into operation on the double... plus the fact that they have the *lowest operating cost* of any breathing equipment.

S.D.: How soon can we get SCOTT AIR-PAKS here so this won't happen again? We've got to maintain continuous production.

*Why not get on the phone or wire
Scott for the name of their nearest
Safety Equipment Distributor.*



**SAFETY EQUIPMENT DIVISION
SCOTT AVIATION CORP.**

211 Erie Street Lancaster, N. Y.

Canada: Safety Supply Co., Toronto — Branches in principal cities
Export: Southern Oxygen Co., 157 Chambers Street, New York 7, N. Y.

Scott Air-Pak **Safety Breathing** **Equipment** *is sold by:*

ATLANTA, GEORGIA—Southeastern Safety Appliances Co.

AURORA, ILLINOIS—S. B. Brown

BILLINGS, MONTANA—Big Horn Supply Co.

BIRMINGHAM, ALABAMA—Safety Engineering & Supply Co.

BOSTON, MASS.—American Fire Equipment Corp.

BRIDGEWATER, MASS.—Joseph L. Murphy

BUFFALO, NEW YORK—American Alloys Co.

CHARLESTON, WEST VA.—Safety First Supply Co.

CHATTANOOGA, TENN.—Industrial Supply Co.

CHICAGO, ILLINOIS—Protective Equipment Co.

CINCINNATI, OHIO—Orr Safety Equip. Co.

CLEVELAND, OHIO—Safety First Supply Co.

COLUMBUS, OHIO—W. E. Brantner Co.

DAYTON, OHIO—The Dayton Safety Supply Co.

DENVER, COLORADO—"Mac" Safety Equipment Co.

DETROIT, MICHIGAN—National Safety Prod. & Ser. Co.

DULUTH, MINNESOTA—W. P. & R. S. Marx Co.

EAST ORANGE, NEW JERSEY—E. H. Netto

EAST ORANGE, NEW JERSEY—Guardian Safety Equipment Co.

ERIE, PA.—Fyr-Fyter Sales & Service Co.

FORT SMITH, ARKANSAS—Interstate Fire Equip. Co.

GLENDALE, OHIO—Ohio Valley Fire Equipment Co.

GREENSBORO, N. C.—Southern Oxygen Co.

HAMDEN, CONN.—D. B. Maxwell Co.

HARTFORD, CONN.—Industrial Safety Supply Co., Inc.

HONOLULU, HAWAII—Hawaiian Gas Products, Ltd.

HOUSTON, TEXAS—Allied Safety Equipment, Inc.

KALAMAZOO, MICHIGAN—Safety Services

KANSAS CITY, MISSOURI—Safety, Incorporated

KINGSPORT, TENN.—Southern Oxygen Co.

LAFAYETTE, LA.—Delta Fire & Safety Equip. Co.

LITTLE ROCK, ARK.—Welders Supply Co.

LOS ANGELES, CALIFORNIA—E. D. Bullard Co.

LOS ANGELES, CALIFORNIA—Dickson Safety Prod.

LOUISVILLE, KENTUCKY—Orr Safety Equipment Co.

MARINETTE, WISCONSIN—Queen City Supply Co.

MEDFORD, MASS.—Charles H. Clougherty

NEW ORLEANS, LA.—Delta Fire & Safety Equip. Co.

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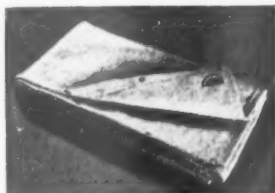
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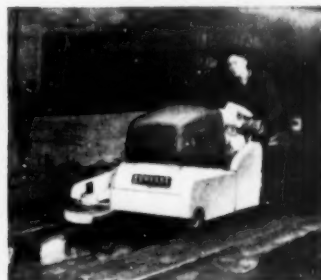
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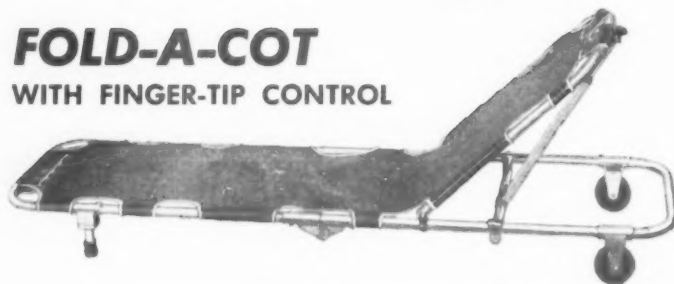
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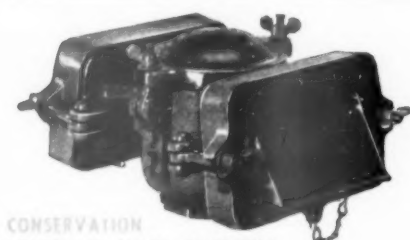
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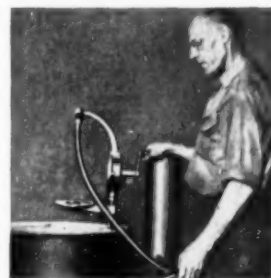
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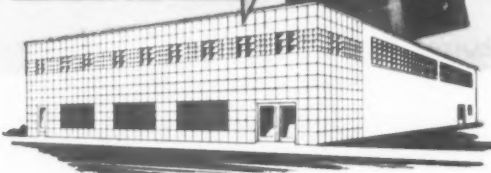
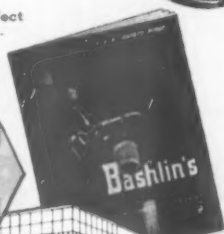


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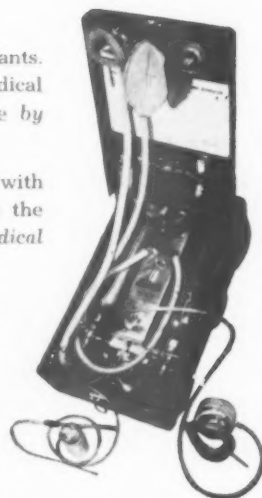
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Keeps a man on the job despite injuries. Fits over bandages. Easily stocked—no lefts—no rights. Also available without foot guard.

SIZES — SMALL-MEDIUM-LARGE

They Insulate
They are Puncture proof



STRONG STEEL TOE

No. 504-S—Double duty for safety with this Reece "Perfect Rocker" Wooden Sole and Steel Toe Shoe... made with durable leather uppers. Keeps the feet at body temperature regardless of room or floor conditions.

Sizes—5-13

REECE WOODEN SOLE SHOE CO.

BOX 32-M

Columbus, Nebraska

There is no substitute for Reece Wooden Soles



SEECLOTH

CLEANS AND MISTPROOFS

WHAT SEECLOTH IS:

SEECLOTH is a chemically treated fabric which when rubbed on glass both cleans and prevents fogging or misting. It has found use in industry as a convenient method for cleaning and preventing the fogging of goggles of workers who must protect their eyes in various industrial operations.

ECONOMICAL:

It is the most convenient and economical method known for this purpose. One piece (8" x 9") will last for a number of months, when used on goggles or glasses.

INCREASES WORKER SAFETY:

The fact that the worker has the means for preventing misting of his goggles right on the job increases the safety of the operation since it reduces the temptation to continue to work with misted glasses. He can fogproof them without leaving his work.

HOW TO USE SEECLOTH:

All that is necessary is to wipe the dry glasses with the dry **SEECLOTH** and thus mistproof the glasses for a considerable period.

OTHER USES:

SEECLOTH has also found use in preventing misting of the inside of windshields in foggy or damp weather. Here also all that is necessary is to rub the dry glass surface with the dry **SEECLOTH**. Mist will then not form on the area that is rubbed. Other applications include its use on spectacles, mirrors, windows, etc.

HOW SEECLOTH IS PACKAGED:

SEECLOTH IS SOLD IN 8" x 9" pieces, packed in a polyethylene envelope which fits easily into the pocket of the coveralls so that the worker can use it right on the job with practically no lost time.

SEECLOTH is also available in larger pieces for windshields or by the yard (36" wide). Special sizes cut to order.



HYGIENE RESEARCH, Inc.

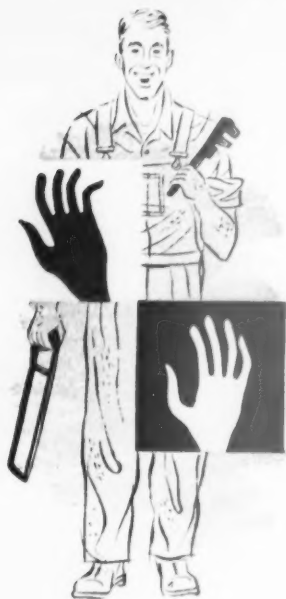
684 Broadway New York 12, N. Y.
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Samples on request. Write Dept. N53.



IMPROVE EFFICIENCY

PROTECT

YOUR WORKERS



IMPROVE PRODUCTION: Stepan ph-6 is a specially formulated, sulfonated oil, bland skin cleanser . . . amazingly effective in removing oils, greases, and other industrial grime. Lotion-like effect actually protects the skin . . . leaving it clean, smooth, and supple. Stepan also offers a complete line of dispensing methods designed to meet every industrial requirement.

Neutra-Foam

New mild synthetic skin detergent with excellent foaming properties. Leaves no disagreeable soapy odor on the skin.

Both PH-6 and Neutra Foam are surprisingly economical. Write for literature and samples.



PH-6

*See our
Demonstration
at Booth*

No. 29

STEPAN

CHEMICAL COMPANY

20 N. Wacker Drive, Chicago 6, Illinois

**You CAN Control the
DEAFNESS
HAZARD . . .**



Maico F-1 Portable Audiometer
LIGHT-WEIGHT • ACCURATE
EASY TO USE • BEST FOR
INDUSTRIAL HEARING TESTS

90% OF AMERICA'S PRECISION HEARING TESTS ARE MADE WITH MAICO-BUILT AUDIOMETERS

See our Exhibit—Booth 218
National Safety Congress
& Exposition

IN YOUR PLANT!

Why run the risk of improper placement of new employees, the possibility of Industrial Deafness claims, and lowered safety standards when it is so easy to incorporate a hearing test in your routine pre-employment physical examination.

Hearing loss can be a potent factor in the incidence of accidents, and in lowering the general performance level of workers. There is only one dependable way to detect hearing loss, and that is by means of an audiometer test.

The Maico portable audiometer is extremely easy to use, and it gives accurate, quick results. Its use will cost you little in time or money—but the savings are substantial.

Make use of this new tool to achieve greater production and higher efficiency. Write now for the facts on control of the Deafness Hazards in your plant.

Maico

46B MAICO BLDG., MINNEAPOLIS 1, MINN.

OILY WASTE CANS



From 6 to 25 gallons.

for old rags or combustible material. Underwriters approved.

SAFETY CANS



1 pint to 5 gallon sizes.

for easy handling of flammable liquids. Underwriters labeled. In 1

FOR EXTRA PROTECTION JUSTRITE SAFETY CONTAINERS AND LIGHTS

DISPENSING PLUNGER CANS

for sponging and cleaning with flammable liquids. In 1 quart, 1/2 gallon and 1 gallon sizes. Approved by Factory Mutuals.



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(#1727-S) — for safe inspection of storage or operating equipment . . . 15" or 30" extensions for lighting inaccessible areas. Underwriters approved.



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SAFETY LANTERN



(#2144-S) 6 volt — for use in hazardous locations. Wire guard and stand. Safety kick-out bulb sockets. U.I. approved.

YOU — as the man directly responsible for the working safety of your personnel and equipment — are asked to consider the safety features of Justrite equipment. These products have been designed, constructed and tested to meet the highest standards of industries everywhere. Used for inspecting, cleaning or storing . . . Justrite Containers and Justrite Portable Lights discourage sparks or explosions — wherever flammable liquids, vapors, or gases are present.

Besides this safety factor, your decision to use Justrite equipment will prove sound because Justrite outperforms — and outlasts — all other similar equipment regardless of price.

ORDER FROM YOUR JOBBER

for free catalog write Dept. NSN.

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(#1904-S) — with belt clip for ease and padded headband for light. Fully flexible with 1,500 ft. beam. Leaves both hands free.

APPROVED



FRANKLIN'S WAX . . . a tough, long wearing, self-polishing wax. Cuts maintenance costs on linoleum, rubber, asphalt tile, wood, etc. Withstands water and damp mopping indefinitely. Classified by Underwriters' Laboratories as anti-slip.



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ASK US TODAY ABOUT YOUR MAINTENANCE PROBLEM . . . prompt assistance, delivery and service on materials assured by Franklin Factory representatives, offices, warehouses and distributors located in principal cities.

Please send me more information on Franklin floor maintenance materials
NAMED _____

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HILD

MAINTENANCE EQUIPMENT

for scrubbing and maintaining floors of all kinds and for scores of other dust-control and clean-up jobs.



Hild Floor Machines

Available in the two types pictured at left . . . with plain handle or with tank on handle to carry 3 gallons of soap and water. Easily interchangeable attachments to scrub, wax, polish, buff, sand, grind or steel-wool floors of all kinds. All models have the HILD Safety Switch and larger models have handles adjustable to operator's height. Six husky models with brush spreads from 11 to 19 inches. HILD Equipment keeps factory floors clean, smooth and slip-safe . . . prevents accidents, speeds up plant traffic and improves employee morale. Special attachments for removing rough, bumpy, hard-caked grease and for cleaning oily, slippery floors.

HILD FLOOR MACHINE CO.

740 W. Washington Blvd., Dept. N510
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Only HILD has the patented Shower-feed Brush



SEE DEMONSTRATION
of HILD EQUIPMENT in
BOOTH 130
OCT. 19-23
CONRAD HILTON HOTEL

HILD Model "K" Floor Machine
Big performance . . . low cost . . . only

\$145

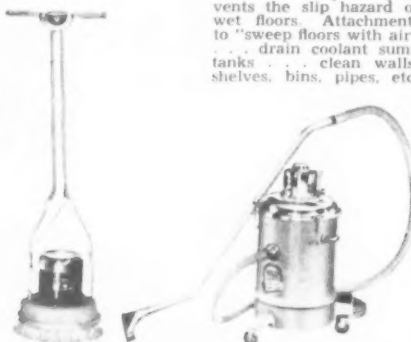
Lowest cost ever for a genuine HILD Floor Machine. Equipped with 3/4 H.P. motor. Brush spread 12 1/2 inches. Brush speed 210 rpm. Attachments to scrub, wax, polish, buff, steel-wool floors in offices or homes.



HILD Wet-and-Dry Vacuums

Always ready for any clean-up job, wet or dry. No filter to change or other "preliminaries." Moisture in vacuum air-stream cannot damage specially designed HILD Bi-Pass motor. Two sizes . . . 15 and 55 gallon tanks with capacity for 10 or 40 gallons of recovered liquid.

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NEWCO WIRE ROPE CLAMP AND THIMBLE



**THE HEAVIER
THE LOAD
THE TIGHTER
IT HOLDS!**

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SIZES
TO FIT
WIRE ROPES
FROM 1/8"
TO 1" IN
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DEVELOPS
85 TO 90%
OF ULTIMATE
ROPE STRENGTH
(95-100%
CATALOG LIST)

For combined safety and efficiency, users of wire rope rely on the Newco Wire Rope Clamp and Thimble. The heavier the load, the tighter the halves are forced together, insuring you of complete safety in operation. Easy to install in field or shop. **NO WRONG SIDE**—threads either way, and never needs lubricating. Increases profit by reducing down time as much as two-thirds.

SEE US AT BOOTH 427

ARE YOUR PRESS GUARDS SAFE — CHECK THIS CHART

If you cannot answer "yes"
to the following questions
"BUY ANDERSON"

Is the die area barricaded during the ram stroke in normal operation?

Is there provision for removing the hand from the die area in the event of clutch failure or other repeats?

Is the above provision so timed that its operation is completed during the first half of the down stroke of the ram?

Can the ram be raised or lowered when dies are changed without making guard adjustments?

Does the guard have all of these three features: Blocking guard; ram operated in case of repeats; enclosure guard?

A	1	2	3	4	5
Yes	Yes	Yes	No	No	No
Yes	No	No	Yes	No	Yes
Yes	No	No	No	No	No
Yes	No	No	No	No	Var.
Yes	No	No	No	No	No

A—Anderson Safety Guard

1 to 5 Represent other specific guards or types now in use.

THE ANDERSON SAFETY GUARD

Manufactured by

LUTHER MFG. CO., INC.

OLEAN, N. Y.

BRING YOUR GUARD
PROBLEMS TO OUR
BOOTH NO. 31 NATIONAL
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- FACE SHIELDS
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- LADDER SHOES
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All types: Safety, Warning, Notice,
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PUNCH PRESS FEEDER



A speed up tool for lifting, feeding and positioning blanks of metal and other materials without inserting the hands or fingers within the danger zone . . . used for separating sheets, transferring from piles or stacks . . . many other uses on all non-porous materials.



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WEIGHS
ONLY 9 OUNCES
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for the many maintenance and production jobs
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212**



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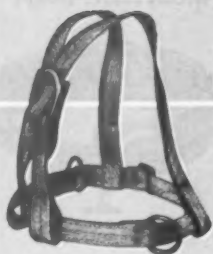
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ROPE SNAP



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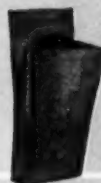
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"Nuttin' ever happens on Sunday"



Three hours later the roof caved in—and the Watchman barely escaped with his life.

Aware of the increased hazards on weekends—which show a high incidence of fire, burglary and vandalism—more and more plants are installing the DETEX tape-recording GUARDSMAN Watchclock system.

With a capacity of 96 hours, the GUARDSMAN maintains unbroken mechanical supervision of your Watchman on weekends. There's no need for a Supervisor (at time and one-half) to return to the plant Saturday and Sunday just to change the clock dial. Entrusting this function to the Watchman is not only against insurance regulations, but it is inviting disaster.

Modernize with the GUARDSMAN. Be safe on weekends as well as week days. Send for free folder.

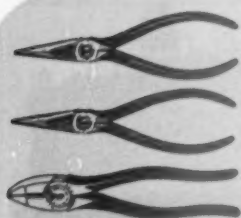
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DETEX
WATCHMENS CLOCKS

DETEX WATCHCLOCK CORPORATION
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PATROL
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1901 M

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RIGHT AND LEFT CLIMBERS

SAFETY FIRST WITH KLEINS

Over the years, there has been a tremendous advance in safety practice throughout all industry. Linesmen, electricians, workers everywhere have contributed to the safety measures that have resulted in today's excellent performance.

We are proud that the equipment produced by Mathias Klein & Sons has played a part in setting new safety standards. The general acceptance of Klein equipment today is the result of the quality that has been associated with the name Klein "since 1857."

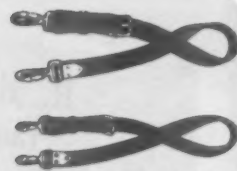
This quality rests on the selection of the finest materials, the precise skill in every step in manufacture—the individual inspection and testing of every piece of equipment and by a continuing program of product improvement and development to assure maximum service, comfort and safety to the user.

Tour the Klein Plant
See us at Booths 65 and 66
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LEATHER, KLEIN-KORD AND
NYLON SAFETY STRAPS



LINESMEN BELTS



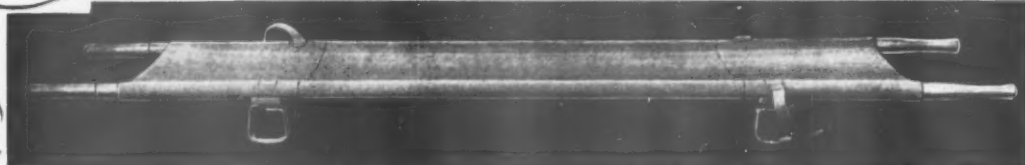
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GRIPS



HAVENS GRIPS

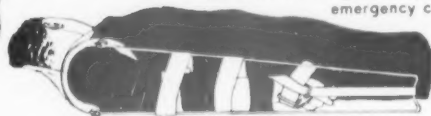
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First Aid EQUIPMENT AND PLANT HOSPITAL SUPPLIES



LITTERS, STRETCHERS, FOLDING COTS, ETC.

No. 1304-C Stretcher, shown, has aluminum poles, aluminum folding undercarriage, shaped hardwood handles. 90" long. Flameproof, mildewproof No. 8 canvas top. Also steel pole burlap top litters and emergency cots.



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Kit No. 73—Includes Arm Splint, Leg Splint half ring, Heel rest, Ankle hitch, Wrist hitch, Leg Sling, Arm strap and carrying case. Thigh and shoulder rings are gauze wrapped and rubber covered. Kit No. 74—Same as No. 73, but with rings felt padded and covered with horsehide.



Booth 418
SAFETY
CONGRESS

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- Thumb and hand splints
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ROBERT E. GROSS

*President, Lockheed Aircraft Corporation
National Chairman, 1953 Aircraft
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Lockheed Aircraft Corporation recently conducted a person-to-person canvass that put a Payroll Savings Application Blank in the hands of every employee of Lockheed's eleven plants in Southern California. At the conclusion of this one-week campaign, 36,419 of the 38,037 employees—95.7%—had signed up on the Payroll Savings Plan. Three of the eleven plants achieved 100% enrollment.

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45,000 companies operate Payroll Savings Plans. In many of these companies employee participation ranges from 60% to 80%; in some, it is even higher. On the basis of Payroll

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- if the many personal benefits of the Payroll Savings Plan are properly presented to them by management,
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Widely Used Eastern "A" Stand

Provides positive protection for men and equipment.

Now produced in three models, with signs and frames in durable baked enamel resistant to weather and rough use:

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 Frame 1" angle; 36" High; 24" x 24" sign

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EASTERN "A" STANDARD
 Frame 3/4" angle; 27" High; 18" x 18" sign
 Flags removable and unit folds compactly.

A complete line of standard and special SAFETY SIGNS in 20 and 30 gauge Steel

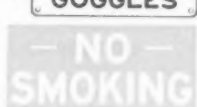
Here is something really new: Eastern Metal safety signs can be furnished with Pre-Set back for permanent mounting without bolts, screws or nails—on glass, metal, wood, brick or any other surface. This in addition to the standard four mounting holes.

For long life, outdoors as well as indoors, only top-grade flexible baking enamels are used—front and back—on all Eastern Metal signs. Note the uniformity of design and excellent readability.

You can depend on Eastern Metal for prompt delivery and economical price.

Note: Actual color of Signs and Flags is Standard Red.

For complete information and prices, write today.



EASTERN METAL of Elmira, Inc.

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STOP ACCIDENTS

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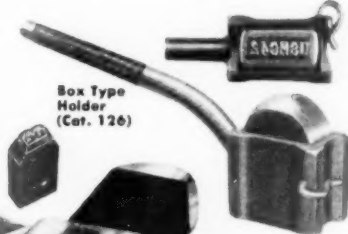
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There is no dangerous *spalling* or *mushrooming* when you use Mecco Safety Marking Tools! These tools—thoroughly proved in every type of marking application—provide maximum service life, deeper and more legible impressions—with greatest safety made possible by means of our special alloy steel, available only in Mecco Safety Marking Tools. A few of these tools are illustrated—hundreds more are available to fit your marking needs.

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Make Marking Safe
with MECCO
"SAFETY" Tools!



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(Cat. 102)



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Hand Stamps
(Cat. 103)



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Save Money!
Save Fingers!



Cost of Amputated Fingers

It pays to keep fingers
out of presses!

AIR BLAST
VALVES

Eject parts at
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of Press.
PRICE

\$29.00

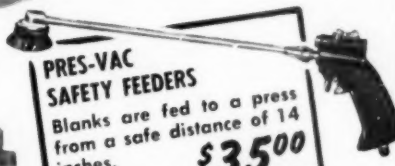


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PRES-VAC
SAFETY FEEDERS

Blanks are fed to a press
from a safe distance of 14
inches.
PRICE

\$35.00



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Speed
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CHICAGO 13, ILLINOIS
District Offices: DETROIT and CLEVELAND

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Also makes these
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- ROLL FEEDS
- REELS
- STRAIGHTENING MACHINES
- and
- COIL HOOKS

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For ACCIDENT PREVENTION



Pouring Molten Steel

High production is a fine goal. But with it goes the responsibility to protect and safeguard workers against the threat of accidental injury—even death.

Every production quota should include an effective safety program. It can be done with the help of

STONEHOUSE SIGNS

They work 24 hours a day...warning, educating, impressing upon workers the gospel of Safety.

There are hundreds of different Stonehouse stock-worded signs for prompt shipment. Special wordings also produced as desired.

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 **Stonehouse**

"Signs Since 1863"

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NO ADMITTANCE
WITHOUT A PERMIT

A FIRE
MIGHT PUT EVERY
ONE OUT OF WORK
HELP THE MANAGEMENT
PROTECT YOUR JOB
NO SMOKING

NOTICE
— ALL INJURIES —
NO MATTER HOW SLIGHT THEY MAY BE —
MUST BE REPORTED
TO THE FOREMAN OR
FIRST AID HOSPITAL
FOR TREATMENT

CAUTION
WEAR GOGGLES
WHEN USING
THIS MACHINE

CAUTION
KEEP
AISLES
CLEAR

 **FIRST AID
— ROOM —**

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THINK
ACCIDENTS
ARE
AVOIDABLE
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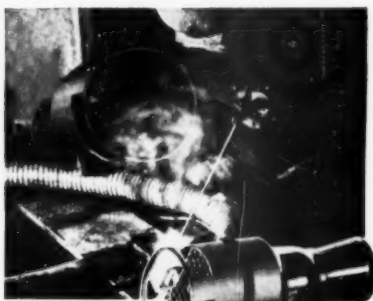
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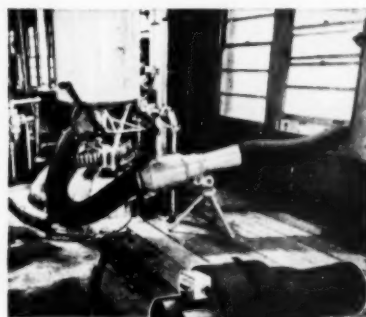
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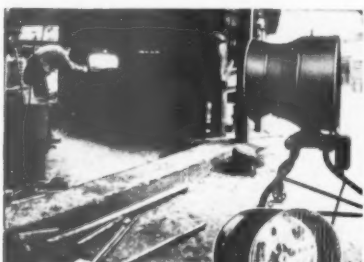
VANO DESIGN "A" VENTILATOR is used here during repairs to a chemical still. This type ventilator is used to ventilate tanks, tank cars, drums, vats, underground cable manholes, pipe galleries, airplane wing compartments, fuselages and other confined places. Uses 8" diameter flexible canvas tubing ("Ventube").



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SAFETY NEWS

Published monthly by National Safety Council

OCTOBER, 1953

THE COVER: While on vacation, in Colorado, President Eisenhower signed a number of bills passed by Congress before it adjourned. Among these was one granting a federal charter to the National Safety Council. This bill, however, was not the one he was signing in the picture.

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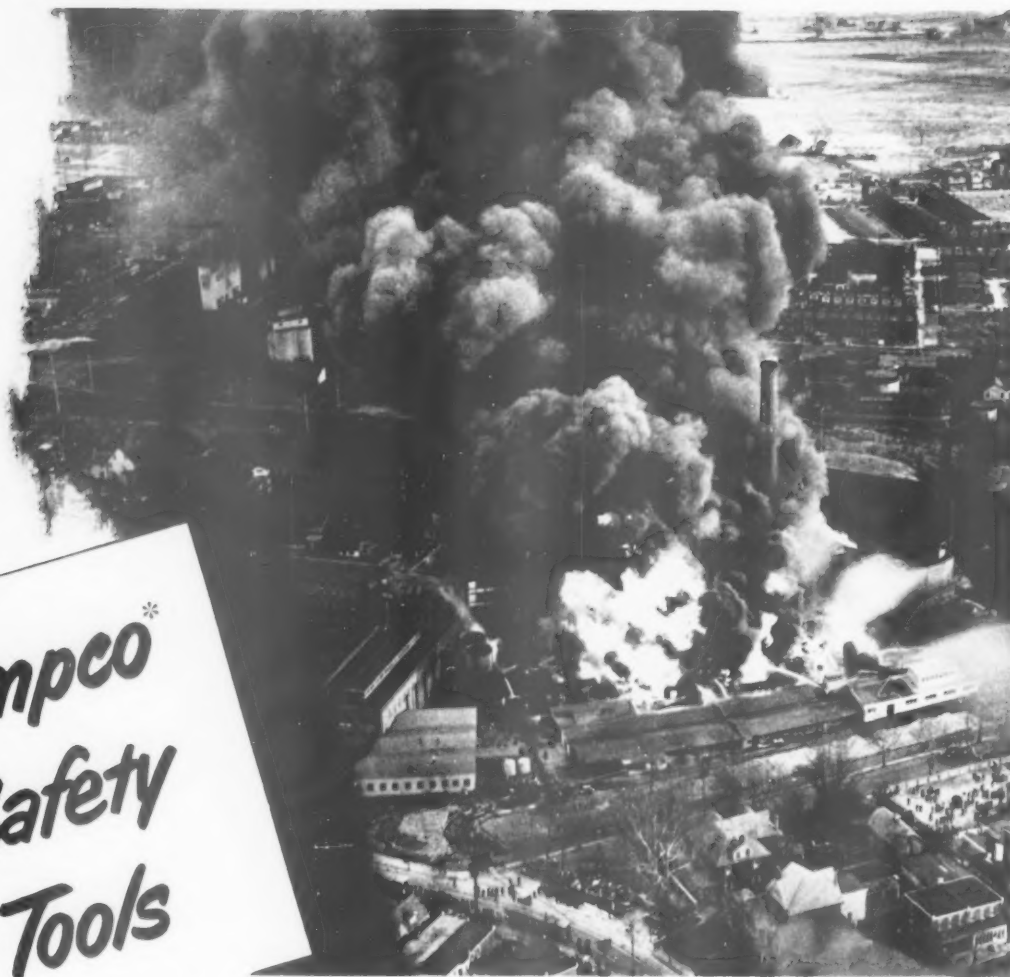


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OCTOBER, 1953

Our Federal Charter



AUGUST 13, 1953, marked another important milestone for the safety movement. On that date President Eisenhower signed Senate Bill No. 1105 granting a federal charter to the National Safety Council.

The charter means that the United States has formally recognized the importance of the accident problem and the leadership of the National Safety Council in coordinating the forces of accident prevention throughout the country and directing their efforts in a constructive program.

From the standpoint of organization and operation, the new federal charter will bring little change in the structure, purposes and activities of the Council. It will remain a privately financed and operated organization. The same Council officers and directors will remain in office, subject only to the annual elections.

The Council has not become an agency of the government nor will it receive federal subsidies. In this connection it may be noted that the federal government, as the nation's largest employer, knows the value of organized accident prevention work. Many of its operations, both civil and military, have established notable records in accident reduction. In accomplishing these results, extensive use has been made of Council services and publications, but the Council's relationship with the government has been the same as with other members.

The charter bestows the prestige of official recognition which has been enjoyed by such public service organizations as the Red Cross, the Boy Scouts and the Girl Scouts. It stamps the seal of approval on the Council's four decades of service to humanity and its present stature and character.

Forty years ago the idea that accidents were preventable was accepted by only a small group of men in industry, (who were sometimes regarded by management as being none too practical) and by the members of the U. S. Department of Labor and the Bureau of Mines, and the newly created industrial commissions of many states.

In the National Safety Council these men found a medium for attaining their objectives. Through group thought and action they developed techniques

and standards for safeguarding the varied activities of working and living. And their missionary zeal brought an ever-widening acceptance of the basic safety idea.

In times of emergency the government has called upon the Council for help. When the United States entered World War I the Council was less than four years old. Measured by present standards, its resources were pitifully meager. But among the Council's member companies were many industrial concerns whose accident prevention methods were already proving practical, and they were ready to place their trained personnel and their experience at the service of the expanding war industries.

Between wars a great depression with widespread unemployment and distress called for quick and energetic measures. A vast public works program was launched, with need rather than experience and physical fitness as the pre-requisite for employment. Under such conditions soaring injury rates were feared. Through the Council, experienced safety men were enlisted to aid in organizing the nationwide work projects for safety. As a result of their efforts the accident experience was considerably better than expected.

Again in World War II the forces of safety were mobilized through the Council under the slogan "Save Manpower for Warpower." Safety men who were already carrying heavier responsibilities on their own jobs responded to the Council's appeal to help the new war industries set up programs. And, as in previous emergencies, the results were gratifying, saving countless man-hours of production to add to the nation's fighting strength.

But these emergency services, invaluable as they were at critical times, were only dramatic demonstrations of a continuously growing safety movement. Year in and year out, the protecting influence of the movement has been felt by people at work, on the streets and highways, and at home.

In granting a charter to the National Safety Council, the federal government, therefore, recognizes the faithful services of thousands of men and women, living and dead, who have made the safety movement a vital and constructive force.

But this recognition, it should be clear, has not been given for past service alone. The important fact is that, by giving it, our governmental leaders have reaffirmed their confidence that the Council will continue to serve the nation well in the tasks of peace as well as in times of emergency.

Ned H. Dearborn

Safety Followed Through

By CARMAN FISH

Some highlights of the two eventful years that followed the historic First Safety Congress

BEFORE a small group of men assembled in New York's McAlpin Hotel on the morning of September 24, 1913, Robert W. Campbell announced a significant event—the organization of the National Council for Industrial Safety

—an association which soon became the National Safety Council, with "Universal Safety" for its motto and goal.

One year before at the First Co-operative Safety Congress in Milwaukee, a committee had been ap-

pointed to make plans for another safety congress, also to consider the possibility of a permanent organization devoted to securing increased safety for human life. The association which came into being at the New York meeting was the result of a year of intensive work and study on the part of this committee.

Like many another worthy project, the plans for a national organization might easily have died in committee. But the founding fathers of the safety movement were purposeful men. They combined a crusading zeal with a practical understanding of the problems facing industry.

The backgrounds of the members of the committee and the varied experience they brought to the task had much to do with its successful completion. Those serving on the committee were:

Ferdinand C. Schwedtmann, secretary of safety committee of the National Association of Manufacturers. (Chairman)

Robert W. Campbell, first president of the National Safety Council.



Opening of the National Safety Council office made front page news. A reproduction of the Chicago Tribune of October 17, 1913.



William H. Cameron, managing director of National Safety Council, 1913-42.

Dr. Charles P. McNeill, U. S. Commissioner of Labor.

Dr. Joseph A. Holmes, director, U. S. Bureau of Mines.

Charles C. McCord, Interstate Commerce Commission.

F. W. Houck, Commissioner of Labor, State of Minnesota.

Dr. Lucian W. Chaney, U. S. Bureau of Labor.

H. M. Wilson, U. S. Bureau of Mines.

Dr. M. J. Shields, American Red Cross.

C. W. Price, Wisconsin Industrial Commission.

James C. McCleary, Iron and Steel Institute.

John Kirby, Jr., president, National Association of Manufacturers.

Ralph C. Richards, Chicago and North Western Railway.

Charles L. Close, U. S. Steel Corp.

David Van Schaack, Aetna Life Insurance Company.

Robert J. Young, Illinois Steel Company.

Lew R. Palmer, Jones & Laughlin Steel Corp.

The participation of representatives of several branches of the Federal Government in the organization of the Council is noteworthy. It marked the beginning of a helpful partnership in which the government neither subsidized nor attempted to control the policies of the Council.

At Milwaukee, the Association of Iron and Steel Electrical Engineers had sponsored the First Co-operative Safety Congress as part of a larger convention. What transpired at the main tent has been largely forgotten but the

transactions of the side show have won a measure of immortality.

Interest in technical problems is inevitably limited but the saving of human beings from violent death and crippling injuries has a universal appeal.

Records of the activities of the committee in the year following the Milwaukee Congress are unfortunately meager. The first meeting was held at the Fort Pitt Hotel in Pittsburgh on January 4, 1913. At

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Signatures of those who attended the first meeting of the National Council of Industrial Safety in Pittsburgh, January 4, 1913: Charles L. Close, Edgar T. Davies, Barney Cohen, L. R. Palmer, R. C. Richards, Ferd C. Schwedtman, Dr. Winthrop Talbot, Lucian W. Chaney, Dr. M. J. Shields, H. M. Wilson, David Van Schaack and R. J. Young.



A student in the radio and television school at the Woodrow Wilson Rehabilitation Center, Fishersville, Va., operated by the State Board of Education. Other departments teach watch repair and automobile body repair and painting.

He Might Have Been a Cripple

By HERBERT W. PARK, M.D.

There are many Bill Simpsons in industry—men whose skills and lives have been salvaged through rehabilitation programs

DO YOU have a Bill Simpson in your organization? Bill is a friend of mine. He is now 30, married and has two children and is employed by the Appalachian Electric Power Company. His home is in Fieldale, Virginia.

This man has a good general physique. He is able to run, jump, lift significant weights, and appears to be a good, general specimen of mankind. I daresay that he would meet most physical standards for employment.

This is his story. On July 26, 1951 this man fell 25 feet from a telephone pole while pursuing his usual work at the Appalachian Electric Power Company. Due to the fact that the company had prepared the men in his work group in first aid, he was moved properly without bending his back and was taken to the hospital in Martinsville, Va. Here, it was found that Bill had sustained a fractured back. Because there was medical evidence to indicate that the spinal cord had been bruised also, certain operative procedures were undertaken at various times to

correct his condition. During this phase of his treatment it was necessary that he remain at almost complete rest. He also had several complications which prolonged his hospital stay. He was discharged from the Martinsville Hospital and was sent to the Woodrow Wilson Rehabilitation Center where I first came to know him.

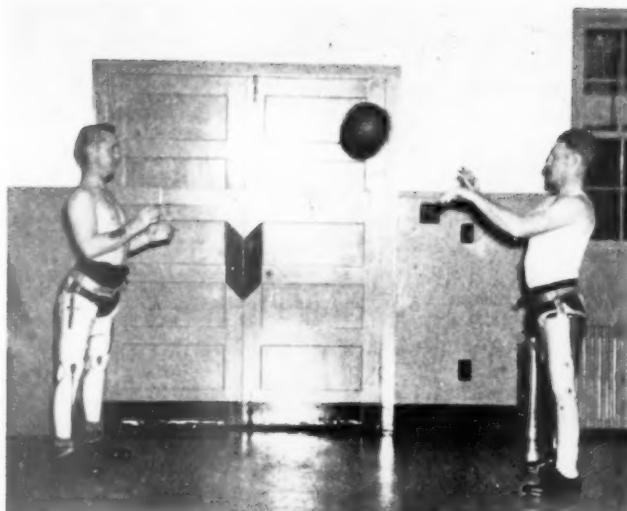
At the time of his admission he was a stretcher case. Due to the prolonged period of time necessarily spent in bed, he had developed severe wasting of muscle due to disuse. His shoulders, back,

hips, knees and ankles were very stiff, and he had some persisting numbness in his feet. He was started under treatment in physical therapy and occupational therapy to increase range of motion, strengthen muscles, teach self care and to train him in walking. In approximately one month, Bill had reached a sufficiently good level of functional ability that he was able to be discharged. He had not regained full strength and full range of motion at that time. However, I felt that he was ready to return to partial employment and con-

Students gain new skills and hope for the future through vocational training. Below: scene in woodworking shop at Woodrow Wilson Rehabilitation Center.



DR. HERBERT W. PARK is on the faculty of the Medical College of Virginia, in Richmond. This article has been adapted from a paper presented at the Virginia Statewide Safety Conference, Roanoke.



Patients with prosthetic appliances gain confidence and agility in the physical therapy department. The recreation program at the Center includes square dancing in wheel chairs.

time on a home routine to get back his full strength and range of motion. Within a month and a half following discharge, Bill was able to return to work full time.

Now, let us survey the financial picture:

Cost of hospitalization and physician's care	\$3,399.60
Compensation paid to the patient's family	797.16
Cost of services at the Rehabilitation Center	233.45
Final settlement (15%)	1,276.00
Total cost	\$5,706.21

Now, let us consider the cost of disability had not Rehabilitation Service been brought into the picture. Because of the severe muscle weakness and stiffness in joints, it is my judgment that Bill would have been considered 90 percent disabled for employment at the end of one year. The cost would have been as follows:

Cost of hospitalization and physician care	\$3,399.60
Compensation to family	1,040.00
Final settlement	7,656.00
Total (90%)	12,095.60

Money saved by investing funds in Rehabilitation program	\$6,389.39
--	------------

Physical therapy treatments aid in restoring functions to injured parts.

I think everyone would agree that this is a significant difference in cost and a tremendous saving to everyone concerned, including the patient, the insurance carrier and the employer. This does not take into account the fact that a new man would have had to be trained to replace him in his work and the untold difficulties and problems that would have arisen in Bill's family had he not been employed for a considerable period of time.

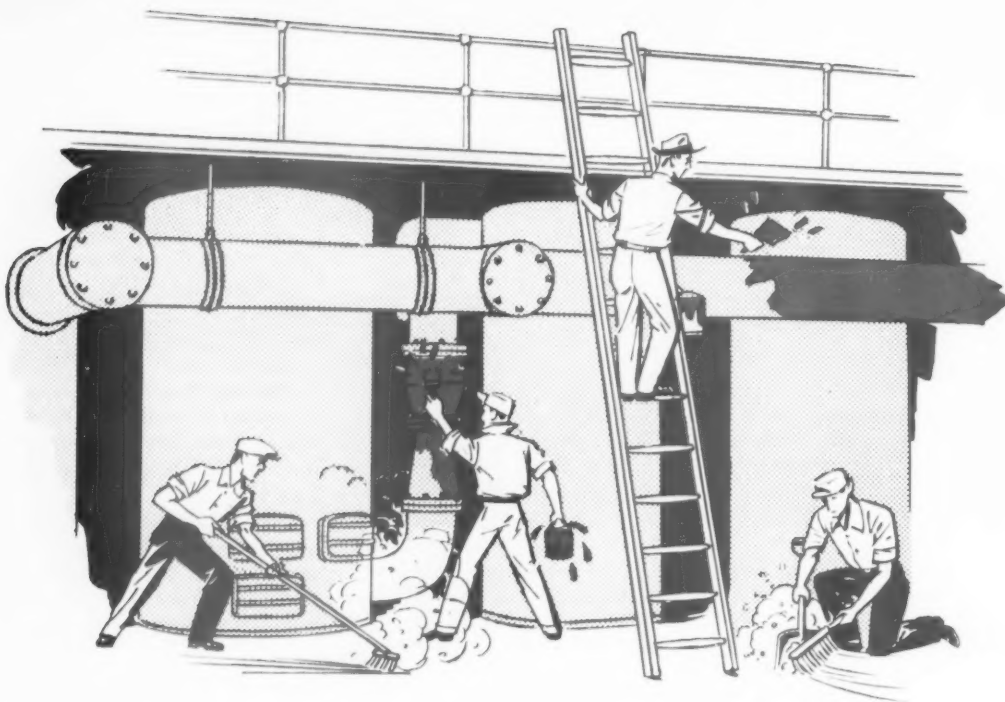
In order to get Bill Simpson back to work in the shortest period of time, many services had to be brought into the picture. 1, ade-

quate first aid following the injury, 2, initial medical care following the injury, 3, the insurance company, 4, The Division of Vocational Rehabilitation, 5, Vocational Guidance and Testing, 6, Physical Medicine and Rehabilitation Services at the Woodrow Wilson Rehabilitation Center and perhaps the most important—a man with a good, stout heart.

The story of Bill Simpson has been repeated many times. I can report to you the findings of the Division of Vocational Rehabilitation of the State of Virginia, the Liberty Mutual Insurance Company, The American Mutual Liability Insurance Company and many other sources regarding the effectiveness of Rehabilitation programming in reducing man hours lost. Statistics from the various agencies are only an enlargement from the single case you have already seen. Perhaps many of you already know that the Liberty Mutual Insurance Company thought that rehabilitation was of

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Accident Prevention Among the Brass

By JAMES W. CARPENTER

**The when, why and who of safety as observed
by an executive who has been through the mill**

IN 1927 our company acquired by purchase a group of gas companies in Nassau County, Long Island, known as the McDonald properties. Our gas operating manager was duly elected vice-president of these companies and was directed to go to George McDonald's office to take charge of the operations.

JAMES W. CARPENTER is Vice-President, Long Island Lighting Company, Mineola, N. Y. This article has been adapted from an address before the Twenty-third Annual Safety Convention, Greater New York Safety Council.

As he told it later, he walked into McDonald's office, explained his mission and asked to be shown around. McDonald took him through the building, came to a room and said "This is your office."

When they walked in, our manager caught sight of a young dazzling blond. McDonald explained, "This is your secretary." Our chap greeted her, led her out to his car and drove to his home. He invited her in, called his wife down to the living room, pointed to the blond and exclaimed, "Take a look

Whenever we had an inspecting party going down from New York we phoned to warn them and the manager turned the boys loose with paint brushes. When the party reached the gas works they saw a structure that looked really smart,

at her. I didn't hire her. She came with the job."

That's the *when* of accident prevention for executives, supervisors and workers *before trouble begins*.

In 1922 I was hooked up with a national holding company group of utility properties. One of the units was Wilmington, N.C., where among other things we had the gas business. The gas works was an early Carolina colonial type of operation with a coal gas bench housed in a prehistoric brick building that Cornwallis slept in when he was chased through that country in Revolutionary times. Fortunately the brick walls had been painted deep red but the wood trim usually looked pretty wretched.

We had a smart gas man running the place and whenever we had an inspecting party of engi-

neers, bankers, security holders or prospects traveling down from New York to look over the situation we used to telephone Wilmington to warn them. The gas man turned the boys loose that afternoon and evening with the paint brushes. Next morning when the party reached the gas works they saw quite a structure that really looked mighty smart.

That's one time for utility executives to work at accident prevention—creating a temporary campaign for more safety or guessing at accident happenings and hoping to do something in advance.

It doesn't work. Safety first is a constant.

Safety work is a Broadway, big time production. It must be designed, written, rehearsed, practiced, reviewed and staged. It must be kept running by publicity, favorable criticism, frequent revision, constant performance and large audiences.

The executive who doesn't believe learns the alternative to this as he sits among the family of his dead employees and tries to bring them some measure of surcease from sorrow when he knows deep in his heart that too little, too late with the safety book has claimed still one more victim.

He finds the hottest seat in the world is the one beside the hospital bed of a faithful employee and perhaps long time friend who peers at him in sardonic silence through the white wrappings that shield a badly burned face and body; another mute witness to the rule that accidents need no rehearsal, can open cold and are as relentless as the black mustached villain foreclosing the mortgage on the old farm. There is no power on earth to turn back the clock against eagerness for economy or lack of interest that neglects preparedness, training and perpetual promotion of prevention.

The *when* for prevention really comes before accidents, before daily performance, before initial employment. If the executive is to achieve the safety record that

brings him full satisfaction he must be ready and willing to contribute of his time and his company's money to indoctrinating youth with the inherent habit of looking before leaping. Safety must be developed as closely as possible to the natural practices of eating, sleeping or walking.

Out of my boyhood still comes the memory of three of my chums who each lost a leg because they had never been taught the penalty of carelessness. One of them was a great pole vaulter, high jumper and a perfect monkey as a rope climber in our high school track meets but such accomplishments offer no compensation against severe physical handicap and early death.

The why of safety. In 1914 I was working as a jack-of-all-trades mechanic in an electric power plant. Somebody set me to the job of turning down a commutator on a small motor driven exciter. I was told about the depth of the cut, the sharpness of the tool and such things but no one mentioned copper shavings and there weren't any safety glasses. By late afternoon that day one of my eyes began to itch, then scratch and finally feel mighty, mighty uncomfortable.

When I reached home my parents inspected the eye but could see nothing. Then they thought of the eye specialist who lived around the corner. I chased across to his home, he looked me over and said "let's take the trolley down to my office." When we reached there he put the spotlight on my face, shot 2 per cent cocaine solution into the eye and then dug into the eyeball with a spade and shovel. When he backed out of the tunnel he had a fine copper shaving. He swabbed out the eye, gave me some lotion, and in answer to my question about what I owed him, answered "that'll be two dollars."

Thirty minutes for the whole job—but that two dollars was what I got for the full ten hours of work that day. Yet the eye was worth a million times that charge.



That's the why of prevention—the cost in cash and human suffering. Today every executive is faced with the endless escalator of

—To page 187

I. Who gets the greatest benefit out of the award plan?

The Award Plan For Recognizing Good Industrial Safety Records, which has been in operation for the last two years, has provided the most clear-cut and objective basis yet used for doing two things:

1. Recognizing good safety performance.
2. Withholding recognition where safety performance has been bad, mediocre, little better than average, or improved only within the range of chance improvement.

Both points are important. Award applicants frequently state that the granting of a Council award would provide a very strong stimulus to safety-mindedness of employees and, thereby, to safe operation. There is no question that this is true where it involves

Recognition for Good Records

A report on the second year of the National Safety Council's Industrial Award Plan

By NORMAN MOZLEY

recognition of a truly noteworthy performance.

However, an award can also be an incentive *before* it is earned—or even if it is *not* earned. Those plants which do not earn awards—they constitute the majority—

should establish the possibility of winning an award as a goal to be achieved. Failure to reach the goal should be a strong incentive to do better in the future—more of an incentive than a too-easily-won award would be.

It could be said that the plants which "get the most out of" the Award Plan are those which deserve awards, and which would not get them under previously-used evaluation systems, and which do get them under the comprehensive system employed by the Award Plan. An added feature is that the safety people in these plants do not have to defend any precise system of record evaluation to their managements by explaining how they failed to get an award when some other plant—with less accomplishment—did get one. Some examples of how this happens in the Sectional Contests are given later in this article.

But in a broader sense, the real beneficiary of the Award Plan (winner or not) is the plant which squeezes the greatest possible safety-incentive, employee relations, and public relations values out of the struggle to create an award-winning record, and also—if it does win an award—out of the award itself. By bestowing its Award of Honor only where performance has been truly outstand-



Window display of the Award of Honor to New Orleans Public Service Inc. Suspended by invisible wires, the plaque was surrounded by a gold frame against a background of black velvet.

NORMAN MOZLEY is Senior Statistician, Statistical Division, National Safety Council.

ing, the Council assures the plant which stages an elaborate presentation ceremony that the glitter of the occasion will not be tarnished by the presentation of any less-deserved Award of Honor to another plant. All such awards are well-deserved.

While the requirements for the Award of Merit are less stringent, they are high, and they are always met if an award is given. The lesser awards are for lesser accomplishment, but they too are for positive and commendable accomplishment—not for loopholes in the rules or for eloquence on the award application.

The illustrations and the captions which accompany them reveal the extent to which many members benefit by their awards. Space limitations prohibit the publication of all pictures and enthusiastic reports of proceedings which have been sent to the Council with the idea that they might make interesting articles. Some of them, individually, are longer than a magazine article should be.

No definite rules can be laid down regarding the newsworthiness of award stories and pictures. However, the editors look favorably on stories that tell *how* the award was won—program, in-



The most publicized safety award in history. Advertisements of the Bell Telephone System in national magazines with circulations totalling many millions and all the telephone companies' publications featured the presentation of the Council's Award of Honor to Cleo F. Craig, president of American Telephone and Telegraph Company, by Ned H. Dearborn, president of the National Safety Council.

centives and the like—also human interest angles, employee and public relationships, unusual circumstances surrounding the presentation.

As for pictures, publication often depends on the presence of some person of more than local prominence in the group, unusual

or interesting poses, or a picturesque setting.

Perhaps the following three fictitious excerpts, written in the manner of kidney-medicine testimonials, will serve to convey the general spirit of the plants which have made the most of their awards. W. G. J. (New York) writes: "Thank you for giving national recognition to the greatly improved safety record we had last year in our plant at Bide-a-Wee-on-the-Hudson. We made major community news events out of the award, out of its presentation, and out of our safe plant. Employees at Bide-a-Wee were pleased with the award and have a united determination to win another one next year. This won't hurt our compensation premiums any."

B. McDill (Montana) writes: "You people are doing a wonderful work. Since receiving award plaque, I feel better than I have ever felt in my life. Everybody likes me."

C. F. A. (Michigan) writes: "Award of Merit presentation was

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In addition to displaying the plaque in a prominent location, many winners of the Council's top award also keep a pennant flying over the property. Winner of this award was the Commonwealth of Pennsylvania Department of Highways. A star is added for each subsequent award.



Joe O'Neill, owner of O'Neill Hardware, Lake Forest, Ill., and president of the Illinois Retail Hardware Association, sets a good example by signing the pledge. Bill Ewert, managing director of the Association is at left.



Joe Holman signs pledge of cooperation with Pennsylvania Farm Equipment Dealers' Association safety program for his firm, Holman and Engle, of Phoenixville, Pa. Looking on is Bob Hartford, secretary of the association.



Signed Up For Safety

By THOMAS H. ALLEN

Through their state associations, hardware and farm implement dealers are being enrolled in an accident and fire prevention program

A SAFETY PROGRAM for the retail hardware dealer and retail farm equipment dealer, channeled through the individual dealer's own association, has been developed by Hardware Mutuals for owners, operators, and employees of many so-called smaller businesses. Policyholders have long been offered a personalized service in the prevention of accidents and fires which features personal visits by loss prevention engineers and the use of various materials slanted at the particular safety problem involved.

However, like other insurance carriers, we have found that many

smaller businesses, principally those with fewer than 25 employees, often do not obtain the maximum efficiency from such a program. Those firms simply do not adopt and maintain the necessary continuing activities which are essential to obtain the greatest safety benefits. Sometimes this is due to lack of interest, lack of funds, lack of manpower. Other times it's something else.

It is not always feasible to make frequent enough personal visits to numerous smaller enterprises to carry on needed safety measures. Even valuable posters, signs, handout pieces and other accident and fire prevention literature often become a total waste.

Carl N. Jacobs, president, recognized, as do many other indi-

viduals and organizations such as the National Safety Council, that there is a growing need for an additional service dedicated specifically to reduce accidents and fires in smaller businesses.

That is the service which has been developed and adopted to augment our existing loss prevention program. It makes available a service designed specifically for organizations which could not ordinarily develop a practical and continuing safety and fire prevention program without outside assistance. To be practical, materials must be "tailor made" for the specific industry group and must be in such form that they can be used without need for alteration.

Our own studies of how best to

THOMAS H. ALLEN is Loss Prevention Specialist, Hardware Mutuals, Stevens Point, Wis.

help make greater safety a reality for the firm which has only a few employees agrees with findings of the National Safety Council and other interested organizations. The most effective avenue for reaching individual smaller businesses so that they actually apply proper safety and fire prevention measures to their individual operations is through their trade associations. This is based on the well established fact that associations have the confidence of their members, have close contact with leaders or member companies, are familiar with the problems and interests of the groups they represent, and are in the best position to stimulate action by individual smaller businesses.

Our safety program is one which

can be sponsored and administered by retail hardware and implement dealer trade associations at no cost for materials to either the association or its members. Nor is it necessary that insurance be carried by us. The program was presented to hardware and implement dealer association secretaries with a complete story of its mechanics and contents beginning in January, 1953. It was explained that through their cooperation the program would:

1. Help control and eliminate accidents and fires for their members.
2. Save money for smaller business by reducing insurance costs.
3. Reduce employee turnover and resultant training.
4. Prevent costly waste of manpower, machines and materials.

To date, 27 hardware dealer and implement dealer associations have adopted the program and are providing its services to over 2,000 of their members. These 2,000 members have more than 10,000 employees. Additional members are pledging cooperation with the safety program daily, and a number of other hardware and implement dealer associations are planning to adopt the plan soon as their association activity. The outline which follows highlights how Hardware Mutuals' safety program for hardware and implement dealer associations functions.

Promotional Materials

To assist the association secretary in instituting the program with his members, these materials are supplied:

1. Draft of announcement letter to association members to be signed by the association secretary. This letter explains the objectives of the program and the services to be made available through the association.
2. Drafts of first and second follow-up letters to be used by the association secretary if necessary.
3. A suggested advertisement for use by the association in trade publications to promote participation in the program.
4. Pledge card to be returned by the association member signifying his acceptance of the program and advising the number of employees and number of locations available for loss prevention posters and bulletins.

As each association enrolls, it receives basic initial materials such as:

1. A notice to be posted by the participating member pledging his cooperation in the program—designed in color and carrying the emblem of the association.
2. A basic safety manual for each participating member, written specifically for the industry, outlining essential steps to be taken and safe practices to be followed.
3. A directory of pertinent safety and fire prevention films available.

Program materials for distribution by the association secretary are provided monthly. Each month's kit is devoted to a specific loss prevention subject pertinent to the particular association, and

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WE PLEDGE TO COOPERATE WITH THE

ILLINOIS RETAIL HARDWARE ASSOCIATION SAFETY PROGRAM

O'NEILL HARDWARE COMPANY.

(Name of Firm)

TO prevent accidents and fires that kill or maim people or that destroy property, we have pledged our active participation in the Association's safety Program. Specifically, we will:

1. Post in a prominent place accident and fire prevention display materials furnished us by the Association.
2. Periodically discuss safety and fire prevention matters with our employees.
3. Distribute to our employees safety and fire prevention materials sent to us by the Association for that purpose.
4. Periodically inspect our premises and operations for hazards.
5. Actually use other "tools" and techniques of the Association's Safety Program.

FURTHER we have pledged that each of our employees will:

1. Personally make certain that proper safety and fire prevention practices are observed.
2. Promptly investigate every hazard noted or called to his attention, and take immediate action to eliminate the hazard. If it is something beyond his control, he will bring it to the attention of the individual who can control it.

We also will investigate fully the cause of every accident or fire and will take prompt and effective steps to have the cause eliminated so the accident or fire will not be repeated.

Signed: Joe O'Neill
(Company Official)

Date: 6-29-53

Dealers enrolling in the safety program sign this pledge of cooperation with the state retail hardware association.



SAFETY ON DISPLAY

By WALTER BOON

Employees are impressed with the display of equipment used in training. Accident experience has been improving, too

A NEWLY-HIRED employee in any large industry, particularly an oil refinery, is often overwhelmed by the extensive "checking-in" procedure. After taking aptitude tests, undergoing a complete physical examination, filling out various forms, answering questions, having various beneficial plans ex-

plained to him and meeting his foreman, he is certainly not in a receptive mood for more talk.

The Safety Engineering Division of the Sun Oil Company's Marcus Hook, Pa., refinery is aware of this fact and accepts it as normal under the circumstances. They know the new man cannot be "sold" on safety by an indoctrination lecture alone. Hence, it fell upon them to supply a mental stimulant to re-establish possible

flagging interest. The Safety Equipment Panel (pictured) has to a great extent supplied this stimulus.

The indoctrinee, upon reporting to the Safety Engineering Division, is shown a panel on which is neatly arrayed a large number of intriguing objects—masks, goggles, inhalators, odd-appearing gloves; footwear of unusual material and design, brilliant-hued blinker lights, face shields, color-

WALTER BOON is safety director, Sun Oil Company, Marcus Hook Refinery, Marcus Hook, Pa.



The safety equipment exhibit at Sun Oil Company's Marcus Hook Refinery supplements safety indoctrination talks to new employees. Several hundred items are featured in the display at the Safety Engineering Division offices.

ful danger and caution signs, gas testing equipment; humorous but effective posters, and many other protective items the likes of which many of the new employees never knew existed. The initial view of this display revives interest. But more important, it accomplishes several other purposes.

The display panel serves as a visual supplement and support to the indoctrination lecture. It ties in with certain portions of the lecture; each produces the effect of complementing the other and the result has been the production of a sharper impact upon the new employee, creating in him at this important period an awareness of several factors which he may have considered lightly or not at all.

Perhaps the indoctrinee may have a vague conception that an oil refinery has a number of hazards not common to other industries. A glance at the panel tends to sharply focus his thoughts in the proper channel and at the same time serves to alleviate any build-up of fear that he might be entering upon a too-hazardous occupation. To further reduce such a build-up, he is informed by the lecturer that the frequency and severity rates of the petroleum industry approximate the average on the chart of safety records of major industries.

During the indoctrination lecture the following main points are covered:

1. Functions of the safety engineering division.
2. Management's outlook towards safety.
3. Rules, regulations and procedures.
4. Explanation of display items.

Functions of Division

The new employee is informed that the Sun Oil Company's Safety

Engineering Division is a service division available 24 hours a day to aid employees in problems pertaining to safety. He is urged to feel free to call on the department at any hour to discuss the removal of hazardous conditions or to secure any of the specialized items he has seen. He is also informed that the Safety Engineering Division is constantly experimenting and researching to provide the finest devices obtainable and that many of the items on display were developed by the company's Safety Engineering Division and are now in use throughout industry.

Management's Outlook

This portion of the talk is devoted to management's intense interest in safety and the sparing of no expense to provide the finest of safety equipment and protective clothing to enable its employees to work safely, yet comfortably. Here the panel provides proof to the indoctrinee that this company not only talks about safety, but it actually spends money to provide equipment to help accomplish it. Normal reaction is that if a company is so willing to provide these items to protect the worker, he in turn, to protect himself, should use them when occasion warrants their use.

In this section of the lecture, the indoctrinee is informed that his degree of safety consciousness and practices determines in no small measure the extent to which the company progresses and likewise involves his own progress and security. Here particular stress is placed on working practices. Various permits displayed on the panel are explained. These include:

1. Chemical work permit, which designates the type of apparel necessary for a particular job on equipment contaminated by chemicals.
2. Permits to enter and to open equipment.
3. Excavating permits.
4. Fire permits.

Explanation of these various permits reveals to the new employee the coordination existing between departments to insure safety on a job. A sample Acci-

dent Report is also displayed and the new man is urged to report all injuries promptly. Also displayed is a Field Safety Ticket, issued by Safety Engineering personnel for violations of safety regulations. The indoctrinee is plainly informed that by means of these Field Safety Tickets, non-conformers to safety regulations are reported. References to various posters on horseplay, improper apparel, disregarding of danger areas and other unsafe practices, powerfully illustrate this point.

Explanation of Items

The new employee is then briefed on specific display items designed to afford maximum protection to his head, eyes, face, shoulders, respiratory system, trunk, limbs, hands and feet. Some items explained will protect a combination of the above against several types of hazards. Prominent among these protective items are: skull-guards to prevent head injuries, various types of goggles to prevent eye injuries due to flying or airborne particles such as common dust or flying objects, and a variety of face shields to protect against possible chemical splashes. Some shields are hooded to afford complete head protection. Additional face protection is provided by specially developed creams.

Devices for respiratory protection on display include a number of masks, each designed to serve under specific conditions and circumstances. These range from the simple mechanical filter type, through chemical cartridge and canister types to air line respirators. The latter operate by three different methods; one is supplied through the plant air system, another received air through an electrically-powered blower apparatus, and the third is manually operated.

Other items shown are protective sleeves and knee pads to provide limb protection; a variety of gloves to safeguard hands against abrasion, hydro-carbons, chemicals, heat and electric shock; safety shoes, hard-toe rubber boots and "booties" to afford foot protection.

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*What to do
and what
NOT to do
in*



First Aid and Emergency Care of

EYE INJURIES

By HEDWIG S. KUHN, M.D.

INDUSTRY is becoming decentralized, so nurses, safety directors and even lay supervisors need to be better informed on what constitutes proper first aid and emergency care for eye injuries.

Nurses, where possible, should insist on getting Standing Orders from the ophthalmologist to whom they refer eye injuries from the plant. If there is a full time medical director, these Standing Orders should be requested through him as applying specifically to eye care.

The information presented here was worked out locally many years ago and revised according to subsequent experience. It has been made available generally through National Safety Council, National Society for the Prevention of Blindness, nursing publications, and other interested groups.

This material may serve as a guide for all personnel handling eye injuries in industry. It does not, of course, supersede specific instructions set up by the medical director or consultants. It assumes that attendants have received adequate training.

The Dispensary Eye Tray

The following supplies are recommended for the eye tray in the plant dispensary:

- Irrigating bulb with normal saline solution or saline in gravity bottle.
- Boric compress tablets.
- Sterile gauze eye patches.
- Scotch or adhesive tape. (Scotch tape is better.)
- Elastoplastic roller bandages (Duke Laboratories). Use when pressure bandage is needed.
- Local anesthetic—Holocaine, Pontocaine, or Butyn, or a new preparation (Dorsacaine).

Fluorescein 2 per cent buffered solution. (Caution: this contaminates easily.)

10 per cent sodium sulymid ointment (Sulymid).

30 per cent sodium sulymid solution (Sulymid).

"Flash" drops: Make up as needed; Do not buy commercial product.

Sterile medicine glasses—plenty.

Sterile eye droppers—plenty.

Pain tablets.

Care of Specific Injuries

1. Technique of removal of foreign bodies by nurse and layman.

1. Take and record:

- a. Acuity with and without correction before using any medication.
- b. If this was impossible before, take vision after eye is anesthetized.
- c. Always check vision before patient is discharged.

2. Anesthetize—Local anesthetic of choice.

- a. Ask patient to look up; drop medication in lower lid. Use several drops.

- b. Do not use dropper out of eye tray supply bottle on the patient.
- c. Put medication into sterile glass with supply bottle dropper.
- d. Use sterile dropper for anesthetizing, using medication in medicine glass.
- e. Sterilize dropper and medicine glass after each case.

3. Have good light; magnification, if possible.

4. For removal, use applicator wound with cotton only. Never use an instrument. A superficial foreign body can often be irrigated out.

5. Put a slight amount of sodium sulymid ointment in eye after removal of F. B.

6. Close eye with patch for half hour or more, depending on judgment, end of work day, condition of eye, etc.

7. Arrange for patient to report in 24 hours for follow-up.

II. Abrasion—Shown by staining, and not centrally located.

1. Close eye with sodium sulymid ointment and keep closed until inspected in 24 hours.

If still stains, send to M. D.

III. How to prepare eye injury cases for sending to M. D.

1. Always use care and gentleness when inspecting an injured eye. Never press on globe; contents of eye can be evulsed during inspection of a severely injured eye.

2. If unable to remove F. B. easily with cotton applicator, simply put patch on and send to doctor without using ointment or further medication or handling.

3. Put patch on other types of injury to keep eye covered and send case to doctor *without* ointment or other medication.

IV. Severe Eye Injuries.

1. Intraocular foreign body.

a. Suspect always if employee reports that eye was struck by F. B. Send to doctor at once.

b. Send to ophthalmologist whether you do or do not see point of entry.

2. Lacerations.

a. Lids: Best done by ophthalmologist. This is really plastic surgery.

b. Too many hastily sewed-up lids lead to contractures, disfigurements and damage suits.

3. Sclera—Special type suturing is needed to avoid choroditis or herniation. Always send to eye doctor.

4. Perforations.

a. Of cornea (through cornea) results in flat anterior chamber. Close with eye patch—no medication.

b. Send to eye doctor at once—preferably as a stretcher case.

c. Iris prolapse—very serious, no medication.

d. Close with eye patch and send to eye doctor.

Bulbar contusions may rupture iris fibers or dislocate lens. These require immediate care.

V. "Flash" (Ultra violet, welding).

1. Anesthetize carefully. Don't force lids; slip solution into very corner of eye until spasm relaxes, then complete.

2. Inspect very carefully to be sure no F. B. is present.

3. Follow anesthetization with ice compresses.

4. Warn patient not to rub eyes when he leaves dispensary.

5. Dispense Holocaine and adrenalin ointment for use at night only.

6. Be sure to see case in 24 hours.

7. A delayed "flash" may occur after employee reaches home. In a plant where welders are working it may be advisable to dispense to each welder medication for home use with careful instructions:

a. Small bottle adrenalin and holocaine solution.

b. Tube adrenalin and holocaine ointment.

c. Warning to report to first aid next day.

Prevention through training and protective equipment is best.

VI. Don'ts.

Don't allow promiscuous eye treatment at plant.

Don't use antibiotics in plant dispensaries.

Don't use yellow oxide; it is irritating except to lid margins.

Don't use argyrol. It covers the trouble and gives a false sense of security.

Don't use the obsolete eye cup. If needed use external hot or cold compresses.

Don't use homatropine.

Never use cocaine.

Never use atropine.

Don't use ointments in ocular burn cases—thermal or chemical. It ties the hands of the eye doctor receiving the case. Instead, close eye gently with sterile dressing and send to eye doctor.

Don't forget to look at cornea when an employee reports for flash. He may have F. B. or bacterial infection, especially if he reports one-eyed flash.

Don't talk about the exact details of the case in front of the patient.

Don't make prognosis.

VII. Chemical Eye Injuries.

1. Techniques out in plant where employee is working.

a. Immediate irrigation is most important.

b. Assistance by fellow employee may be necessary because of pain and spasm of lids.

c. Use of eye-washing fountain, shallow bowl, rubber hose, or put head in bucket of water—anything that really gets water into the eye.

d. Eye must be forced open as spasm of the lids is always present.

e. Irrigate fully and copiously.

f. Then take employee to first aid *quickly*.

2. At first-aid station.

a. Anesthetize quickly and carefully.

b. Irrigate copiously and quickly with normal saline solution—10-15 minutes by the clock.

c. If concrete, plaster, or solid chemical material has been involved, search for particles under lid and remove carefully with saline solution.

d. Put patch on.

e. Use no medication in eye (unless specifically instructed by eye consultant to whom case goes). Send to eye consultant at once.

3. Anhydrides and Detergents.

These require special attention. They damage the eye not by form-

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Low Voltage—High Hazard

By HERBERT HEINRICH

Understanding the nature of electric current and the factors that determine severity of shock are helpful in avoiding injury

INDUSTRY recognizes the hazards of high voltages and men who work with it are highly trained before they are permitted to work around high tension areas. Such is not the case with regard to low-voltage circuits. Considerable education has to be accomplished along these lines. Such circuits are used in every home, shop and factory and, as a result, the uninitiated have daily contact with electrical appliances, conductors, fittings and tools. There are a few important things everyone working in the vicinity of electrical equipment should understand for his own protection and the protection of others.

Every year more than 700 persons are electrocuted in accidents involving voltages of less than 750 volts. Some of these fatalities and many painful shocks occur on 110 volts. Unfortunately, it is not generally appreciated that contact with so-called "low voltage" circuits, below 750 volts, can produce fatal electric shock. Persons repeatedly receiving accidental shocks that are not fatal draw the false conclusion that since they have been shocked without being killed, no one else could receive a shock that could prove fatal. Their mistake is voltage itself is not the measure of electric dosage through the body which determines severity of the shock.

Three factors determine the severity:

1. Actual quantity of current flowing through the body.

HERBERT HEINRICH is manager, System Operation Department, The Hawaiian Electric Company, Ltd., Honolulu, Hawaii.

2. Path of current through the body.
3. Duration of time current flows through the body.

These factors are highly variable even where voltage itself is constant.

The path of current through the body depends upon points of contact. Shocks are usually received through one hand with the shock current passing out of the body thru the feet. However, cases of fatality are on record where path of the current included the head, chest and then out thru the hands and feet. Most damage is done when the chest, which contains the vital organs, is included in the path.

Duration of contact is important. It depends on whether a man grasps a charged part and cannot let go because the current causes a severe muscular spasm beyond his control.

The most important variable is current itself. Current (or amperage) is not entirely dependent on

voltage but depends also on resistance of the shock circuit through the body, including both body contacts.

Body resistance can be easily measured and varies from 100,000 ohms to 1,000 ohms or less depending on contact surfaces. These may be small or large areas; dry skin or wet; loose contact or tight.

The epidermis (outer skin) contains no blood vessels or nerves and, therefore, is a fairly good insulator when dry. For example, it has a dry insulation value of 15,000 ohms per square inch as compared to a wet value of 150 ohms. The derma (inner skin) is rich in blood capillaries and nerves and is a poor insulator, like the rest of the body. The skin, when charged, acts as a condenser with a poor dielectric, having a power factor of .1 at 10,000 cycles. Under certain circumstances only a fraction of an ampere is required to kill.

Applied to these three factors of

TABLE I. Current Values and Probable Results

Contact and Body Resistance	Circuit Voltage		
	100 Volts	1000 Volts	10000 Volts
500-1000 Ohms	200-100 MA	2-1 Amp	20-10 Amp
	Death	Death likely	Survival possible
	Slight Burns	Marked burns	Severe burns
5000 Ohms	20 MA	200 MA	2 Amp
	Painful shock	Death	Death likely
	No injury	Probable burns	Severe burns
50000 Ohms	2 MA	20 MA	200 MA
	Scarcely felt	Painful shock	Death
		No injury	Burns probably slight

* Death is to be anticipated, especially if shock is received in critical phase of heart cycle or is of a duration longer than full heart cycle.

TABLE II

Current Values (MA)	Effects
0-1	Perception
1-4	Surprise
4-21	Let go
21-	Muscular inhibition
40-	Respiratory block

electrical shock, Ohm's law states:

Current Through Body equals Voltage Applied to Body divided by Resistance of Body and Contacts.

Where the body is well grounded through water or dampness, body resistance is lowered and danger of a serious shock current is great. For example, it has been determined that a man cannot tolerate the pain resulting from holding on to more than 11 volts and contact with a circuit of 20 volts, or greater, will kill.

Current passing through the lower trunk from leg to leg, unless of a large magnitude and duration of time, will not cause too much difficulty. Contact burns usually are the results of such exposures. However, large amounts of current passing through any part of the body will cause severe burns and hemorrhages. Small amounts of current, measured in milliamperes, can cause death if the current path includes the chest. When this occurs, several things happen, including:

1. Muscular contractions which can stop breathing.
2. Temporary paralysis of nerves controlling respiration, resulting in respiratory inhibition which may last for a considerable period after current is interrupted. Cessation of natural breathing may not produce serious after effects. Artificial respiration can provide necessary ventilation until natural breathing is re-established.
3. Fibrillation causing instantaneous electrocution is the serious result of low currents from low voltage contacts. Fibrillation is unsynchronized fluttering of the heart, resulting in cessation of blood circulation. This is serious because body tissue cells require oxygen for life. If the supply of oxygen to the brain is cut off for more than a few

minutes, serious permanent injury can result. Doctors find it difficult to stop fibrillation and start the heart beating normally.

Comparatively large currents caused by higher voltages will result in a violent contraction of chest and heart muscles which will effect a vise-like grip on these muscles and fibrillation is prevented. It is possible for the muscles to relax upon removal of the current and artificial respiration will serve to a good purpose. This explanation shows why more high-voltage shock cases have been resuscitated as compared with low-voltage victims.

The accompanying tables illustrate the effects of brief contact with 60 cycle alternating current.

All shock victims should have artificial respiration applied immediately and continued until the victim recovers or rigor mortis sets in.

The problem of prevention of low voltage electric shock is, in principle, a simple one. It means basically:

1. Keeping clear of contact, in any way, with a grounded surface when handling electrical appliances or connections.
2. Ground any external metal parts of portable tools or stationary electrical equipment.

In almost all cases of fatal or serious electric shock, there has been such a contact when hands

TABLE III

RANGE OF CURRENTS (100 MA)

Producing Heart Fibrillation (Shocks of Short Duration)

1 - 2	{	Fair probability
11 - 25		
2 - 4	{	Good probability
9 - 11		
4 - 9	{	Very dangerous Excellent probability

were wet. Therefore, education along these lines will help:

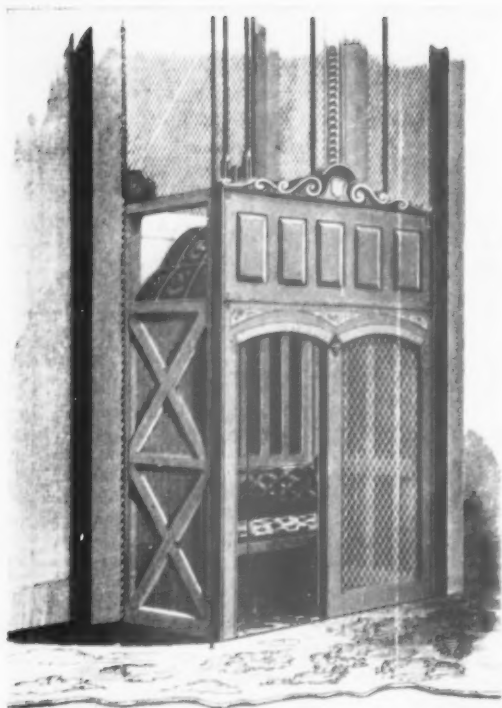
1. Do not handle ungrounded electrical appliances in bathrooms or near water faucets at sinks in laundries, etc. when hands are wet.
2. Do not use ungrounded electric drills or other portable tools in wet cellars, garages, shops, etc.
3. Do not use improper extension lights in boilers or tanks.
4. Do not attempt adjustments or repairs without de-energizing the circuit.

People should be taught to dispense with frayed appliance cords, faulty caps, plugs and fixtures. Any evidence of faults such as arcs, sparks, or shocks should be ample reason for removing such appliances or tools from service until causes can be detected and removed by competent personnel. Frequent checks on wiring and protective devices should be made to prevent fires and shocks. Proper fuses or other protective devices

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"Don't hold supper for me, dear. Something unexpected turned up."



The Elevator's Century of Progress

The Otis Steam elevator of 1876 had half a dozen new safety devices. It cost as much as \$15,000. Red plush seats added a luxurious touch.

THE elevator industry, which makes possible today's breathtaking skyscraper buildings, was born just a century ago, when Elisha Otis invented the first successful safety brakes for vertical transportation equipment.

This industry which now lifts millions of persons and tons of materials daily, had its inauspicious beginning in a tiny workshop on the banks of New York's Hudson River. Although people had been building hoists for centuries, all previous models had one serious fault in common. They would drop like a stone, if the lifting cable snapped. Otis was the first to equip a hoist with an automatic safety device which prevented the car from falling, should the cable give way.

Because sales orders were conspicuous by their absence, Mr.

Otis prepared to join in the gold rush to California. His plans were altered by an unsolicited order for installation of two of his "safety hoisters" in New York City. On September 20, 1853, Elisha Otis opened his own shop to fulfill his first contract, and thus founded the elevator industry.

The sales winds remained calm, so in May of 1854 Otis arranged to demonstrate his safety device at the Crystal Palace exposition in New York. To prove his faith in the invention, Otis rode one of these hoists to the ceiling and then ordered the rope cut. This startled many of the spectators, but still there was no great onrush of sales. During 1856, only 27 elevators were sold.

Things began to look up, in 1857, when Otis installed the world's first passenger elevator in a New York store. By 1860 Otis had perfected a steam passenger elevator with an elaborate car and half a dozen safety devices in addition to the original invention.

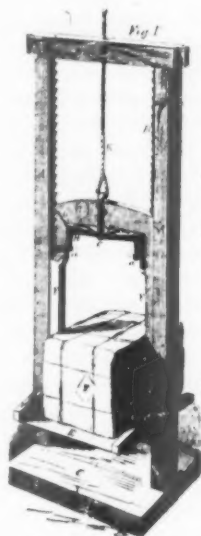


Group-supervised, intensive service elevators, without attendants. With electronic equipment, self-service elevators are completely automatic and safe. This elevator was installed in the Atlantic Refining Company building in Dallas, Texas, in 1950.

UNION ELEVATOR WORKS — AND — **General Machinery Depot,**

117 FRANKLIN STREET, NEW YORK,
BEYOND BLOCK WEST FROM THE INTERNATIONAL HOTEL AND TAYLOR'S BROADWAY SALOON.

E. G. OTIS, Proprietor.
(SUCCESSOR TO WILMOTH OASLEY.)



Keeps constantly on hand, or will furnish to order at short notice
OTIS' IMPROVED PLATFORM ELEVATORS
FOR STEAM, WATER, HAND, OR OTHER POWER.
(PATENT APPLIED FOR.)

SO CONSTRUCTED, THAT IF THE ROPE BREAKS.

THE PLATFORM CANNOT FALL.

Suitable for Mills, Factories, Warehouses, Hotels, Hospitals, Landries, Bakeries, Printing Offices, Book-Binders, Sugar-houses, &c. &c.

THE SAFEST AND BEST MACHINES IN USE.

Prices, including lifting power, platform, guide timbers, safety catches, bolts, chain, rope, &c., put up in complete running order, in buildings not over five stories in height:

For No. 1, lifting 500 lbs.	8500
" 2, " 1000 "	400
" 3, " 1500 "	450
" 4, " 2000 "	500
" 5, " 3000 "	650
" 6, " 4000 "	750

Will also furnish at short notice, **ASAS ELEVATORS**, with platforms, or "dummies," superior hand Hoot Wheels, &c. Also, Steam Engines and Boilers, from two horse to one hundred horse power, shafting and pulleys, with improved self-adjusting hangers; iron turning lathes; planing, slotting and drilling machines; belt cutters; Daniels' planing machines; sawing and dressing machines; belts, coach screws, bolts, saw leather, &c.

All kinds of machinery sold on commission at the usual rates. Applications by mail promptly attended to.

E. G. OTIS,

(Successor to Wilmoth Oasley.)

117 FRANKLIN ST.,

NEW YORK

Explanations of drawings on the 3d page.

Certificates and testimonials on the 4th page.

This leaflet, printed in 1855, is the earliest known Otis advertisement. Even in those days safety was a strong sales argument.

Suddenly architects and builders became aware of the great potential of this invention. They realized that elevators could make the upper floors of a building the most valuable, instead of just so much unwanted space.

Office buildings had previously been constructed as little more than private houses on a larger scale. Prior to Otis's invention, an office building more than two stories high was considered impractical. Now began the work of replacing these outmoded structures with five or even six-story "elevator buildings."

The first hydraulic elevator was installed at 155 Broadway, New York in April 1873. Later in the year, another was installed in the Stock Exchange. The advent of hydraulic elevators was a great stride in this field, since it made

possible faster service, with increased safety. Building owners were attracted by the decreased cost of installation and more economical operation than previous steam powered lifts.

The electric elevator, the silent, speedy service we receive today, had its inception in 1889. The first successful, direct-connected electric elevators were delivered to the Demarest Building, in New York City, that year.

The year 1900 saw the first Escalator, another Otis invention, in public use at the Paris Exposition, where it was awarded a grand prize.

Tremendous strides have been made, during the last decade, in speed, safety and convenience of elevator traffic. Today's elevators are automatically supervised by ingenious electronic techniques

and control devices. This electronic system automatically readjusts itself when traffic surges change the normal operation, or when cars are taken out of service. Passenger waiting time is automatically measured to prevent overlong waits for service.

Steps are now being taken to eliminate the human element in elevator operation. Self-service elevators are now being installed even in busy office buildings. Operation of these completely automatic elevators is reported to be as safe and convenient as electronic equipment and modern engineering can make them.

From a creaky, manually-operated wooden platform to the automatic, safe electronic marvel of today that is the progress chalked up by the elevator industry in the past century.

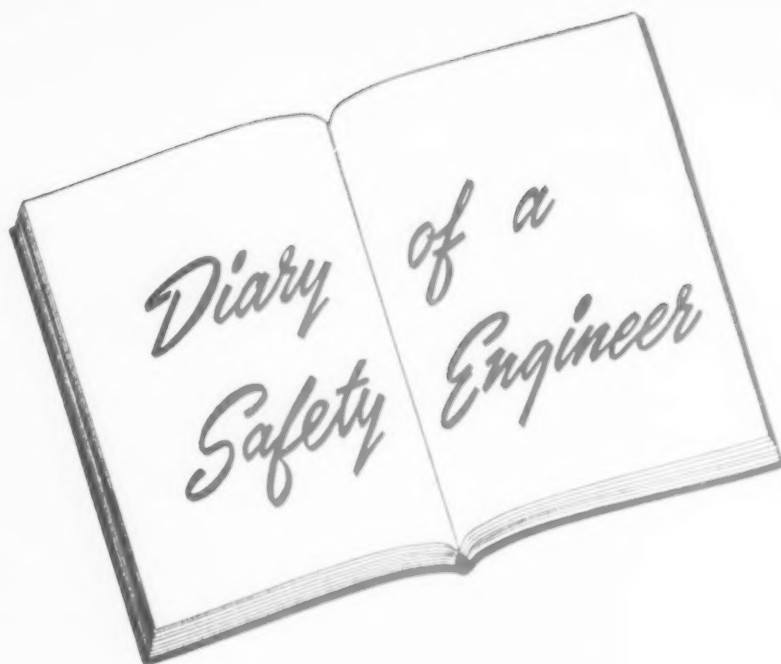
Award Safety Fellowships

Winners of five fellowships at New York University's Center for Safety Education have been announced by Dr. Herbert J. Stack, director of the Center.

Harry Stevenson of Angola, N. Y., will receive the Sanford Perkins Fellowship given in honor of the former vice-president of the Travelers Insurance Company; and Ernest Schrot of Pennsylvania State Teachers College, Lock Haven, Pa., is the recipient of the G. B. Butterfield Fellowship established in memory of the former secretary of the Hartford Accident and Indemnity Company.

The award named in honor of Walter Paine of the Aetna Casualty and Surety Company goes to Leslie Palmer of Texas A & M College. The Albert W. Whitney Fellowship, given in memory of the late safety leader, has been awarded to Earl Heath of the Baltimore County (Md.) Schools; and the Edward J. Bond Fellowship has been presented to Ronald Patterson of Michigan State College.

Motorist: A person who, after seeing a wreck, drives carefully for several blocks.



Recruit for a Congress

(Fiction)

By BILL ANDREWS

Thursday, October 1, 1953

EVER SINCE I've been a safety engineer, I've wished that I could persuade one of our top corporation executives to attend a National Safety Congress. A couple of times it has happened, but never on the kind of a basis that I really wanted it.

When I worked for the ordnance plant, we got a high management man on a panel discussion after much persuasion. He armed himself with facts and figures that I supplied, and he made a rather pompous statement in favor of virtue which added nothing to anybody's knowledge.

Then, when I was made general chairman of our NSC section a few years ago, Claude Jackson (who was still our president then) attended my installation and made a very effective and flattering speech. But he didn't stay long enough to do any listening.

For the last year, I've been prodding our present president, Larson, to attend the Congress, not to spout off, but to see and hear and learn. I was not conscious that I was making any progress toward convincing him.

Then, in September, three things happened in quick succession. First, I filed my annual request for

the assignment of a good-sized party to the Congress. While this was still waiting Larson's approval, my doctor ordered me to the hospital for a minor operation that turned out to be not so minor and left me for three days too feverish and pain-wracked to handle any business, even by phone.

Finally, while I was out of action, my assistant, Harry Dexter, ordered a shutdown of our bank of degreasers.

Harry's action looked a lot more arbitrary than it was. It looked arbitrary because no one had shown any real ill-effects from fumes. He called for the shutdown on the basis of analyses of air samples that showed toxic concentrations just barely inside our conservatively figured danger range.

It wasn't really arbitrary, because he and I had known of some weaknesses in the ventilating set-up, and I had specifically instructed him to watch the situation closely and to act quickly if the need arose.

But there was a lot of work in the plant, and Harry is young, and the production men tried to browbeat him. So, in short order, Harry was on the carpet in Larson's office, called on to defend his action.

Strange how fast the kids grow up! Less than three years ago, Harry went to one of our outlying plants on a routine inspection trip and promptly got into a nasty wrangle with a minor foreman on an issue of housekeeping that took all my alleged skill to smooth over.

Now the same boy was having to battle without my help against all the pressure of high-ranking men for a course of action that was costing a lot of money—and without the backing of the argument that men had been hurt already by the bad conditions.

He played it wisely. He didn't go to Larson asserting that, of his own knowledge, the situation was dangerous, or that he was simply acting on my delegated authority. He took two documents with him—the lab report on our samples, and a copy of the Congress *Trans-*

actions of a few years ago in which a top-flight chemical engineer laid out a set of recommended standards on concentrations of fumes—including the fumes of the particular solvents we use in degreasing.

And then, when Larson had checked these, and had said, "What can be done?" Harry simply called for a report of the plant engineering department which they'd worked up at our request two weeks before, offering a remedy for the ventilating weakness.

As Harry said to me later, "Boss, it was easy. I didn't have to try to be bright or clever. I was scared silly that I'd gum the play, but actually all Larson wanted was the facts. He looked over my dope and then sent me off, saying he'd let me know. In an hour I got a copy of a memo to plant engineering, telling them to act fast. And scrawled on the bottom of the copy in Larson's handwriting was the note, "Good catch, Harry Larson."

When I got back to the plant this week, Larson called me in to ask how I felt and to speak a good word for Harry. I noticed the copy of the Congress *Transactions* volume on his desk. He flipped it open and said,

"I've been reading this thing Harry left with me. There's some good stuff in it."

I nodded and replied, "Some pretty smart guys worked hard to get that program together."

He grinned wryly. "There is also some very weary guff in it," he said.

I had to agree with that, too. I remember one speech that year—even my naive young safety committeemen had looked at me in the middle of the windbag's oration in puzzlement, as if to ask, "Why do we have to listen to this stuff?" It was well below the quality of a departmental safety meeting speech in any good company.

But the same section's sessions had produced not only the authoritative paper on concentrations of toxic fumes, but a swell panel on maintaining employee interest, a good journeyman job on pre-

Odds on the Bunk

WHAT'S WITH THE GUY who says this Safety Stuff is the Bunk?

The attitude a person expresses toward any one phase of his activity is usually manifested throughout his whole make-up.

A guy who takes chances at work will take chances on the road. A guy who takes chances at work or on the road will take chances at home. A guy who takes chances at home or on the road will raise a family who takes chances. It is sort of a creeping disease that pollutes everything coming in contact with it.

Where do the young and inexperienced get their knowledge? Why, from the example set by the old folks. Not what they say—but what they do. No matter what you tell them, your actions will betray you if they are not consistent.

The least the "old man" can do, if he doesn't care about his own hide, is to consider the example he may be setting for the young and inexperienced. He who sets a bad example is more to be condemned than he who sets no example at all.

Too many of us think we are protected by the masses from the accident statistics that confront the unfortunate each day. With 160,000,000 people in the United States, why should we be the one to suffer? When the National Safety Council predicts that 500 will be killed in mishaps over a holiday—we think, naturally that doesn't include us—and forget it.

But, then we hear of the good looking young fellow down the block who was killed in the auto crash and left a young wife and three children; or the cute little girl across the alley who drowned while at the beach on a picnic; or of the little guy your Jimmy plays with who got his back broken when hit by a car while on his bicycle; or the kids across town who were suffocated in an old abandoned ice box; or Joe who lost three fingers in his portable electric saw at home; or Bill, in your department at work, who lost an eye due to a hot chip hitting it; or Sam, across the street, who fell off the ladder and fractured his pelvis; or Jake who got a hernia moving furniture at home; etc., etc.

Pretty soon, if you sit down and try to analyze these things, these old statistics appear to be crawling up on you. Maybe, if you're bright enough, you'll decide that a little "safety in action" on your part might work better than playing the odds on the masses.

It doesn't take much. Just a healthy regard for the exposures you are aware of, and a little ingenuity and anticipation of those liable to rear their ugly heads, should see you through satisfactorily.

It will really be a happy day when these guys who call safety the bunk are converted—but some of them won't live that long.

ROBERT D. GIDEL, Senior Engineer,
Industrial Department, National Safety Council

planning heavy machinery moves, and a debate on the universal goggle rule.

I started to explain how an occasional lemon creeps in, but Larson

just laughed at me. "Look," he said, "I've heard worse from highly-paid speakers at meetings of top-flight executives. I'm not

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Chlorinated Solvent Degreasers

Recommended practices for safe operation

By GEORGE M. HAMA

SOLVENT VAPOR degreasing is a quick, economical and effective means of removing grease, wax, fats, oils and tars from such nonporous products as glass and metals. The degreasing fluids used are non-flammable chlorinated hydrocarbons—trichloroethylene or perchloroethylene. They are volatile solvents which, under improper operating conditions, can produce a high vapor concentration in the breathing zone of the workers.

Exposure to high concentrations of this vapor can result in illness. Symptoms associated with breathing excessive amounts of trichloroethylene, in the usual order of occurrence, are euphoria, dizziness and temporary unconsciousness. A prolonged period in such a state can prove fatal. This is an uncommon occurrence and generally occurs only as a result of negligence or a lack of proper instructions.

Concentrations of vapor below which no effects on the health of the worker are apt to occur on repeated eight-hour exposures are

GEORGE M. HAMA is Industrial Hygienist, Bureau of Industrial Hygiene, Detroit Department of Health.

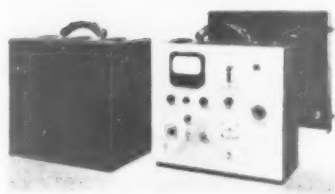


Figure 1. Direct-reading instruments facilitate determination of solvent vapor concentrations in workroom atmosphere.

known as MAC (maximum allowable concentration). The MAC for trichloroethylene and perchloroethylene has been set by industrial hygienists at 100 parts* of vapor per one million parts of air.¹ The odor of 50 parts of trichloroethylene per one million parts of air can be detected by most individuals. Concentration of solvent vapor can be determined either by chemical analysis or by direct-reading instruments. Evaluation of workroom exposures has been greatly facilitated by the use of direct-reading instruments, which have replaced slow, cumbersome laboratory methods.

(Figure 1 illustrates the Davis-Halide meter, a direct-reading instrument.) This meter gives instantaneous readings of trichloroethylene or perchloroethylene vapor in the air. The determination of vapor concentration in the air during solvent vapor degreasing operations has been of great value in revealing conditions which might result in high exposure.

Choice of Degreaser

A vapor degreaser consists basically of a chamber in which liquid solvent is boiled, a space above this chamber containing hot solvent vapors (in which the work is cleaned), a condenser to maintain proper vapor level in the apparatus, and a proper height sideboard or freeboard above the water jacket or condensing area correctly proportioned to the dimensions of the machine. See Figure 2.

In degreaser design, a great deal of research has been done by manufacturers of such equipment. Creditable engineering details such as proper freeboard height, balance between the capacity of condenser, and heat input as well as many other items, have resulted in well-designed, commercially available degreasers which, when properly used, not only conserve solvent but keep solvent vapor exposure at a minimum.

Commercial degreasers are designed for chlorinated hydrocarbon solvents, generally trichloroethylene. This solvent has a certain vapor pressure, boiling point, and

*This figure may vary with state and local regulations. As this article is written, the American Conference of Governmental Industrial Hygienists is considering raising the MAC to 200 ppm.

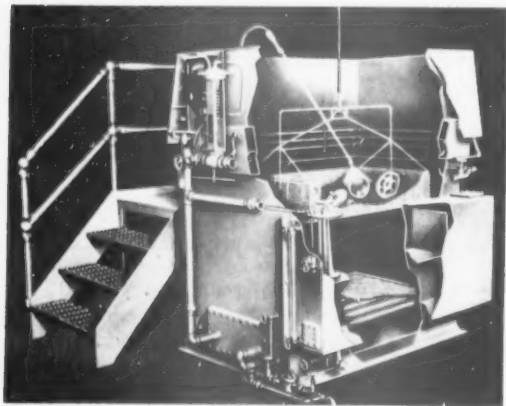


Figure 2. A hand-operated degreaser. Although more dependent on the human element than automatic or conveyorized degreasers, vapor concentrations can be controlled at a safe level.

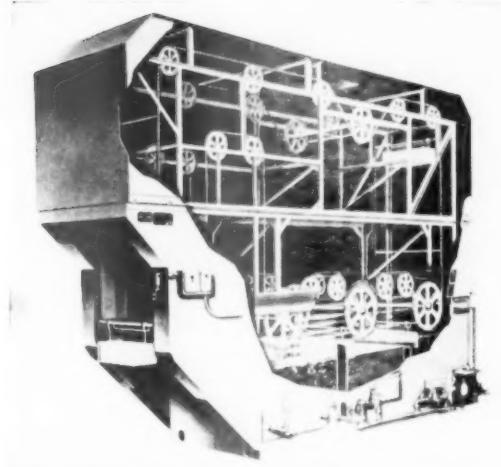


Figure 3. An enclosed automatic degreaser is effective in keeping solvent vapor out of the air.

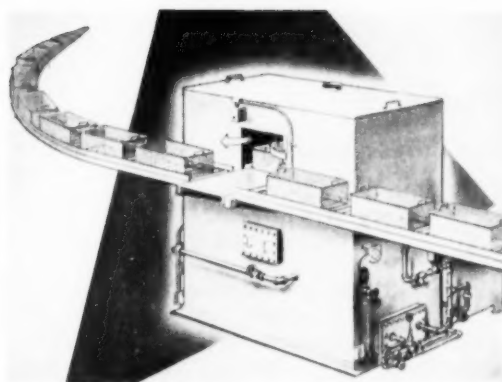


Figure 3a. A conveyorized unit is also effective in confining vapor. Available in large and small sizes.

specific heat. Other materials should never be substituted for the specified solvent or a modification of controls made, unless the equipment manufacturer is first consulted.

Serious illnesses have occurred among workers from the substitution of highly toxic carbon tetrachloride for the trichloroethylene specified. Also, flammable liquids such as ethyl alcohol have been accidentally substituted with catastrophic results, leading to loss of life.

Attempts to construct homemade degreasers almost always result in a degreaser of inferior design lacking proper conservation of solvent and resulting in exposure of workers to high concentrations of vapor. Many cases of serious illness have been reported because of the use of improperly designed, homemade degreasers.²

All degreasers must be provided with correctly designed water-cooled condensers. Degreasers of the portable drum-type without water condensers for casual use in garages and machine shops have been found to produce high concentrations of vapor.

Although there are several methods of designating degreasers, there are two distinct types from the vapor standpoint—the hand-operated degreaser (Figure 2) and the automatic or conveyorized degreasers. (Figures 3 and 3A)

Breathing zone vapor concentrations can be controlled to a safe level with a hand-operated degreaser if it is properly operated and located. The hand-operated degreaser is vulnerable to improper operation which produces high vapor concentrations. Automatic or conveyorized degreasers are less subject to the human factor in operation. They afford more adequate protection against cross-drafts by the very nature of their design. Figure 4 shows a comparison of average exposure to vapor from a hand-operated and an automatic degreaser. Data for these results were obtained from air determinations in a plant where identical materials were degreased in both automatic and hand-operated degreasers.

Recent work by manufacturers

of degreasing equipment has resulted in some new and improved handling methods. Completely enclosed, conveyorized units are now available in both small and large sizes.

In periods of increased production, it has been noted that there is a tendency in most plants to speed up and overload the hand-operated type degreasers. This, invariably, leads to high and sometimes dangerous exposures. The inherent design of conveyorized degreasers makes speeding-up difficult, since they require less supervision for proper operation. Where work can be adapted to this type of design, it should be chosen because of the reduced possibility of exposure to the worker.

Size of the degreasing unit is

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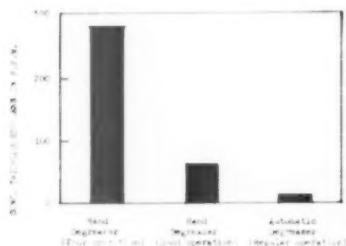


Figure 4. Comparison of exposure with a hand-operated degreaser and an automatic degreaser, degreasing the same parts.

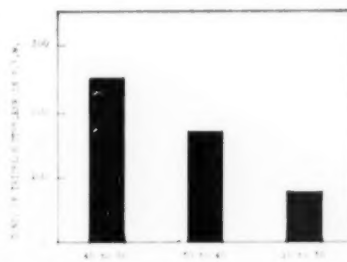


Figure 5. Concentrations of trichloroethylene at various air velocities over a hand-operated degreaser. (Velocity across tank in ft/min).

Injury Frequency Rates

What do they measure?

How meaningful are changes?

By H. GENE MILLER

CONTRARY to general opinion, injury frequency rates ordinarily do not provide an accurate evaluation of the safety program.

In addition, changes in injury rates—increases and decreases—do not necessarily indicate similar changes, either in direction or amount, in the level of the program.

Lest these introductory comments leave the impression that the writer sees no value in injury rates, let it quickly be stated that this is not so. The writer strongly favors compilation and use of injury rates. Rates are valuable and useful—particularly when it is understood what they mean and what they do not mean—which is the subject of this discussion.

Through the years, many attempts have been made to replace the injury frequency rate with some other evaluation device. None other has succeeded as a substitute, however, so the rate now used must be fairly satisfactory. However, the rate will be more useful if those who employ it understand better what it means and what it does not mean—what it measures and what it does not measure.

Frequency Rate

This is what the frequency rate does measure: calculated for a particular plant, it measures the actual injury experience of the plant for the period covered by the rate. It does not necessarily meas-

ure the plant's safety program, especially if the plant is small or the period covered is short.

For example, an injury frequency rate of 20.0 means that during the period for which the rate was calculated, disabling injuries occurred at a rate of 20 per million man-hours of work. The rate of 20.0, though, is not necessarily a measure of the plant's safety program. The program might actually be better than this or it might be worse. Let's see why this is so.

Suppose a plant had 43 disabling injuries during a year's time. This would be an average of 4 per month. It is practically a certainty, though, that there would not be exactly 4 injuries in each one of the 12 months. One month there might be 3, or 2, or maybe none; in another month there might be 5 or 6, or even more.

Anyone who has observed injury totals by months knows that variations around the monthly average (4 in this case) is a normal occurrence, even though the hours worked and all other conditions remain the same. Variations in the number of injuries can occur without there being any change whatsoever in the safety program itself. The program might be exactly the same from one month to another—and in general, just as effective—but still the number of injuries (and the injury rate) can fluctuate widely.

A frequency rate calculated for any particular month, then, does not necessarily measure or evaluate the safety program. It only shows the rate at which injuries

occurred during that month. The same thing applies to yearly rates. The frequency rate for any year merely shows the rate at which disabling injuries occurred during that year—it does not necessarily reflect the level of the safety program during that year.

Chance Affects Spacing of Injuries

While the total number of injuries during a period of time will be related to the general level of the safety program, the occurrence of particular injuries will be subject to a variety of circumstances which can be summed up in the one word "chance."

To state it another way, where injury-producing circumstances exist, sooner or later they will cause injuries, and the number of injuries will bear a relationship to the number of injury-producing circumstances. Within this situation, however, the exact time of occurrence of an injury, and the time lapse between injuries, will be determined to a large extent by chance.

The number of injuries can vary from one month to another, and from one year to another, by chance alone, without there being any difference in the number of injury-producing circumstances—i.e., without there being any difference in the level of the safety program.

On the other hand, and this is important, a variation in the number of injuries may indicate a change in the level of the safety program. But how is one to know whether the variation is due to chance or due to a change in the program?

Techniques Evaluate Changes

Fortunately, there are statistical techniques which can be used to evaluate changes or variations in injury totals. It is possible to state, with a good degree of ac-

H. GENE MILLER is Director, Statistics Division, National Safety Council.

curacy, whether a change in the number of injuries is due to chance, and therefore has little meaning, or whether it indicates a new level of safety performance.

The statistical approach to this problem is very simple. For any given number of injuries, variation limits are determined which show the amount of variation or change which can occur due to chance. Then, as long as actual changes hold within these limits of chance variation, there is justification for the assumption that they do not indicate any change in the general level of the safety program.

Specifically, the procedure for evaluating changes or variations in a given number of injuries is as follows: First, a "unit" of variation is calculated. A unit is equal to the square root of the number of injuries. For example, if the normal number of injuries during a certain period of time is 100, then a unit of variation is the square root of 100, or 10. If the normal number of injuries is 25, a unit of variation is the square root of 25, or five; etc.

Next, it has been established that 2 units cover most of the variation that can occur due to chance. Therefore, the range of chance variation around the normal or average number is determined by multiplying the unit of variation by 2.

Thus, if the average or normal experience of a plant were 100 injuries per year, the number of injuries in any one year could vary from 100 by 20 in either direction—from 80 to 120—due to chance alone. Summarizing the steps, they are as follows:

- Step 1, $\sqrt{100} = 10$
- Step 2, $10 \times 2 = 20$
- Step 3, $100 - 20 = 80$
- Step 4, $100 + 20 = 120$

By the same procedure, if the average experience of a plant were 25 injuries per year, the number of injuries in any one year could vary from 15 to 40 due to chance alone. In similar manner the range of chance variation can be calculated for any average number of injuries.

Guarded Against Beanballs



AFTER a recent beaning, Johnny Groth, St. Louis Browns outfielder, was spared the tragic fate of Ray Chapman, the major league's last playing field fatality, who was hit by a ball thrown by Carl Mays in 1920.

Groth was felled by a pitch, but escaped with a mild concussion—because he was wearing a plastic helmet liner which helped absorb the impact.

The protective helmet insert is made of fiber-glass, reinforced with synthetic resins. It is designed to provide protection for the player's temples and areas over the ears. A sweatband and sponge dome liner help absorb impact.

The cameraman caught Pirate Manager Fred Haney getting the jump on a Bakelite head-protector, on the southpaw side of our picture. At right, Buc Coach John Fitzpatrick smiles as a baseball caroms from his protected noggin.

For the plant with 100 injuries per year as its normal or average experience, as long as injury totals in subsequent years stay within the range of 80 to 120, and do not tend to concentrate near one end of this range, there is justification for the assumption that the variations do not indicate any change in the basic level of the safety program itself, but instead are merely chance variations which have no significance.

When setting up variation limits, it is important that a reliable average be used as the plant's normal experience. In determining this average, injury totals must be

used, and not injury rates, because the unit of variation is related to the number of injuries.

Assuming no important changes in the hours worked, if the injury totals per year show only small variation, then two or three years' experience would probably provide enough data to determine a reliable average. If yearly injury totals show wide variations, more years should be used.

Procedure Applied to Specific Case

Let us see how this procedure would work in another example. Suppose a plant, in which the

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MODEL 150-B

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Ansul "B" Model Wheeled Extinguishers are completely new. Dozens of design changes have improved their operating characteristics as well as their appearance. They provide faster, easier extinguishment of fires almost twice as large as those handled by our "A" model wheeled extinguishers. New Ansul Wheeled Extinguishers are easier to move to the fire. They can be actuated faster. They'll put out more fire faster. They're easier to recharge and maintain. And they will give even more years of trouble-free service.



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OFFICES AND DISTRIBUTORS IN PRINCIPAL CITIES IN THE U. S. A., CANADA AND OTHER COUNTRIES

New Designs and New Equipment to be Featured at Safety Show

The 41st NATIONAL SAFETY CONGRESS and EXPOSITION is scheduled for Chicago during the week of October 19 to 23. Exhibits, confined to the Conrad Hilton Hotel, will be a must for all delegates. Each year manufacturers of fire protection and safety equipment point for the week of the Safety Show to introduce new models and new safety devices. These exhibits provide an excellent opportunity for safety personnel to investigate the latest developments by manufacturers of safety equipment.

New Wheeled Extinguishers

Featured in Ansul Chemical Company's exhibit will be the new "B" Model Ansul Wheeled Extinguishers. Fire-fighting effectiveness of the Models 150-B and 350-B is nearly double that of the "A" Models which till now have been considered tops in fire extinguishing capacity. In Ansul's new wheeled units operation has been simplified, maintenance is easier and certain safety features have been incorporated into these new models. The appearance has been improved as a result of styling by Raymond Loewy. And the new baked enamel finish assures greater durability of their sparkling appearance.

Preview of New 10-Pound Model

Although the Ansul 10 Extinguisher will not be in production until after the first of the year, delegates to the Safety Show will get a sneak preview of this new Ansul development. It, too, is styled by Raymond Loewy and combines an attractive appearance with the functional superiority associated with all Ansul Fire Extinguishing Equipment.

Demonstration of Nozzle Assembly

Of considerable interest to all fire protection personnel will be a demonstration of the quality control practiced in the assembly of an Ansul water-tight nozzle and in its subsequent pressure test. In a corner of the Ansul booth (Nos. 92-93) a special work table will be installed. Production supervisors from the Ansul plant will go through the operations of assembling a nozzle from previously inspected parts. After each nozzle has been assembled it will be subjected to a 200 lb. gas pressure test as is done at the factory.

Another feature of interest to delegates will be a series of photographs showing the various steps taken in the manufacture, filling and inspection of gas cartridges for Ansul Hand Extinguishers. Emphasis is placed on Ansul's rigid quality control in the manufacture and filling of this all-important part of a dry chemical hand extinguisher.

The display will also include actual models or photographs depicting Ansul's complete line of Dry Chemical and Met-L-X Dry Powder Fire Extinguishing Equipment.

(Advertisement)

SMALL BUSINESSES and ASSOCIATIONS



By A. M. BALTZER

Director, Small Business and Associations Program, NSC

Canned Safety

The Can Manufacturers Institute, one of the most safety-minded associations to join the Council in 1953, launched a very comprehensive program for its members. Monthly bulletins cover such subjects as safety organization, reporting, accident costs and savings, safety promotion and technical material. An important part of their service is the series of specific posters, and attractively prepared, well written promotional material.

The results of the program are starting to show up according to figures sent in by John Dingee, Crown Can Company and chairman of the C.M.I. Safety Committee. Statistics by size of plant are equally interesting:

19 locations—fewer than 100 employees—frequency rate 13.5.

75 locations—more than 100 employees—frequency rate 7.4.

As with most associations, special help is being offered to the smaller companies with higher injury frequency rate.

Do Associations Want Safety?

"Yes" is the unqualified answer if requests for our *Handbook of Accident Prevention* is any indication. More than 150 associations took us up on our offer to send them a complimentary copy of the red Handbook and a number of them also plan to redistribute it to their members as a means of stimulating interest in accident prevention.

This 92-page safety manual, which provides the safety know-how for the Council's smaller mem-

bers, received many compliments from association executives and safety engineers. This raises our hopes that the more technical aspect of safety can be made acceptable to non-safety executives.

For Association Executives

The National Institute for Commercial and Trade Organization Executives, held at Northwestern University August 9-15 included a two-hour session on Industrial Safety in the week-long course. A. E. Murphy, executive director of the Folding Paper Box Association of America, used charts and exhibits to explain how his association got started on the safety program, how it saved money through accident reduction and how other associations could achieve the same results with a minimum of effort.

Ray Ketchmark, secretary Central Region FPBA and your reporter participated in the one-hour discussion period following Mr. Murphy's talk and had the oppor-



Cartoon character Foxy McCan sparks the safety program of the Can Manufacturers Institute.

tunity to advise a number of small business associations on specific activities. It was encouraging to note the genuine interest with which this first safety session was accepted.

Safer Restaurants

The National Restaurant Association, representing about 50,000 eating places, and numerous local and state associations, recently called upon us for help in starting safety activities. This is the type of industry that can be best reached through trade associations because the average employment in each restaurant is approximately 20 persons. Few, if any, restaurants ever assign even part-time staff personnel to accident prevention, yet restaurants have the added problems of public liability and fire prevention.

The Association plans to gather statistics on costs and causes of restaurant accidents. Then it will publicize these facts and promote activity among its membership. Plans are under way for setting up a small safety committee which can work with us and sponsor the preparation of easy-to-understand safety material for management and employees.

Consultation For Associations

When an association writes in for help we gladly extend it. But, when an association goes to the expense of sending representatives to Chicago to get suggestions on a long-range safety program we feel that our program is really hitting pay dirt.

Within the past few months associations such as the Liquefied Petroleum Gas Association, the Valve Manufacturers Association and the National Association of Cotton Ginners and the Fiber Box Association sent representatives to the office. Since most of the members of these associations were definitely "small business" we welcomed the opportunity of working with them and, with the help of corresponding staff representatives, are continuing to cooperate with them.

LINES TO A LINEMAN

ILLUSTRATED BY NORMAN ROCKWELL

No word of pen or stroke of artist's hand
No flowered phrase or oratory's boast
Need tell the story of the world you've made,
'Tis writ upon the pages of the land
From north to south—from coast to coast.

Those poles you mount—those lengthened strands you string
Are not just sturdy uprights in the sky
That march across the miles in proud parade,
You've made them into words that help and sing
A doctor's call, good news, a lover's sigh.

Deep etched in time the record of your skill
The work you've done—your willingness to do
The fires and storms you've tackled unafraid.
Your signature is carved on every hill
Yours, too, the creed—"The message must go through."

BELL TELEPHONE SYSTEM



Norman
Rockwell

INDUSTRIAL HEALTH



Abstracts of current literature
on Industrial Hygiene, Medicine, and Nursing

BY F. A. VAN ATTA
Industrial Department, NSC

Pest Extermination

Pesticides. Formulation. Relation to Safety in Use by Wayland J. Hayes, Jr. and George W. Pearce. *Journal of Agricultural and Food Chemistry* 1:466-469 (June 10, 1953).

Very little has been written on the specific subject of increasing the safety of pesticide formulations although it can be achieved in a number of ways, not all of them applicable in any single situation, and is well deserving of some study. A toxic insecticidal chemical will remain a safety problem no matter what its formulation may be, but this fact should not discourage efforts toward improving the formulation. Such efforts will not replace a careful and continuing educational program to insure safe methods of handling.

The simplest improvement in principle is the use of less toxic active ingredients. This cannot be used generally, but occasionally. The most striking example is the substitution of DDT for lead arsenic in recent years. There are no confirmed cases of chronic DDT poisoning and confirmed cases of acute poisoning are invariable associated with eating of a relatively large quantity of DDT.

In developing formulations with maximum safety factor, the solvent is of great importance, both because of the inherent toxicity or flammability of the solvent and because of the possible differences in absorption from various types of solvent.

In the formulation of dry insecticide powders, the dusts should be selected for their non-toxicity. In particular, the concentration of free silica should be held to a

minimum since the exposure of the commercial sprayer or the mixing plant worker may be significant.

The use of non-dusting powders can greatly decrease the exposure of people who mix the dusting formulations. As an example, a change from a standard water wettable powder to a non-dusting powder in one instance decreased the average parathion concentration at the mixing of spray solutions from 2.15 to 0.37 micrograms per liter of air. The use of a liquid concentrate for the mixture reduced it further to 0.04 micrograms per liter.

Absorption through the skin is generally more important with liquid formulations than with powders, but properly chosen liquid formulations can greatly reduce skin absorption. This is particularly true when the concentrate is formulated as a paste or soft jelly type of material.

The addition of emetics and of colors to pesticides are well known ways of making safer formulations, but their utility is quite limited.

Insecticides

Health Problems of Vaporizing and Fumigating Devices For Insecticides, a Supplementary Report. Anonymous. *The Journal of the American Medical Association*, 152:1232-1234 (July 25, 1953).

THE FIRST REPORT of the Committee on Pesticides supported a recommendation that only DDT and gamma benzene hexachloride (Lindane) or mixtures of the two should be used in continuous thermal insecticide generators and that they should be used at a rate

not exceeding one gram to 15,000 cubic feet of space in 24 hours and should not be used in homes and sleeping quarters or other places where continuous exposure was possible. The Committee pointed out that the majority of devices then in use were poorly constructed and improperly installed and violated health practices. Since that time 14 states and 35 municipalities have adopted regulations on these devices and other governmental groups have controlled them through the use of existing provisions of the Health Department regulations.

Since this recommendation appeared, the Federal Interdepartmental Committee on Pest Control has found that it is ineffective in certain particulars and has issued a further recommendation that the continuous thermo-generators be so constructed that output in excess of that recommended is impossible and that the variation in output be not greater than 25 per cent of the rated dispensing rate.

The amount of insecticide absorbed from the air where these devices are used depends a great deal on the nature of the exposed surface. Such things as varnished wood, linoleum, plastic food wrappers, kraft paper, wax paper, rubber sheeting, fatty and non-fatty foods and water preferentially absorb Lindane from the atmosphere. Foods will absorb from 1/10 to 1 ppm per day when exposed to the vapors from a properly operating continuous thermo-generator. Water, under similar conditions, absorbs suffi-

—To page 211

*tear out - and
file this page!*

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face cloth for personal sanitation • panorama view
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Approved.
Has 40 sq. in.
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and fumes.

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inorganic gases.

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With
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COVER'S
"Nod & Shake"
GOGGLES
Gas-tight,
fog-proof.
Wear with any
respirator.

\$2.00

THE ACCIDENT BAROMETER

Prepared by the Statistical Division, National Safety Council

ACCIDENTAL DEATHS in June totaled approximately 8,900, no change from June, 1952. An increase in deaths from public non-motor-vehicle accidents was offset by a decrease in deaths from home accidents. Fatalities resulting from motor-vehicle and occupational accidents numbered about the same as in June, last year.

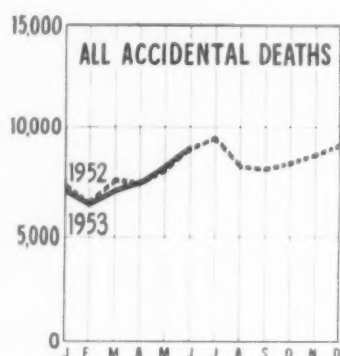
The six-month death total was 44,100, a reduction of 2 per cent from 1952. Most of the decrease occurred in home accident fatalities but deaths from occupational and public non-motor-vehicle accidents also were less numerous. Motor-vehicle accident deaths showed a moderate increase over last year.

Motor-Vehicle Deaths

There were approximately 3,100 deaths from motor-vehicle accidents, or the same as in June a year ago.

Deaths during the six months totaled approximately 17,300, an increase of 3 per cent over 16,830 in 1952. The death rate per 100,000,000 vehicle miles was 6.5, a reduction of 3 per cent from the 1952 six-month comparable rate of 6.7.

Of the 47 states reporting for six months, 17 had fewer deaths than last year, 3 had the same number and 27 had more deaths. Reporting cities with populations of more than 10,000 had an in-



	1953	1952	Change
June	8,900	8,900	0
Six Months	44,100	45,000	-2%

crease of 9 per cent for June and 3 per cent for the first half of the year.

Regional changes from 1952 in the six-month death totals were:

North Atlantic	+ 7%
South Atlantic	+ 2%
North Central	+ 4%
South Central	- 2%
Mountain	+ 6%
Pacific	- 1%

Occupational Accidents

June deaths from occupational accidents numbered about the same as in June last year—1,400. The January-June death total was 6,900, a reduction of 1 per cent from 1952.

The June frequency rate per million man-hours in 17 sectional accident prevention contests conducted by the National Safety

Council was 6.51, a decrease of 7 per cent from last year. The June rate for plants in community council contests was 6.96, an increase of 12 per cent over 1952. The six-month rate in sectional contests was 6.16, a reduction of 6 per cent while in community council contests the rate was 7.24, a reduction of 13 per cent.

Public Deaths

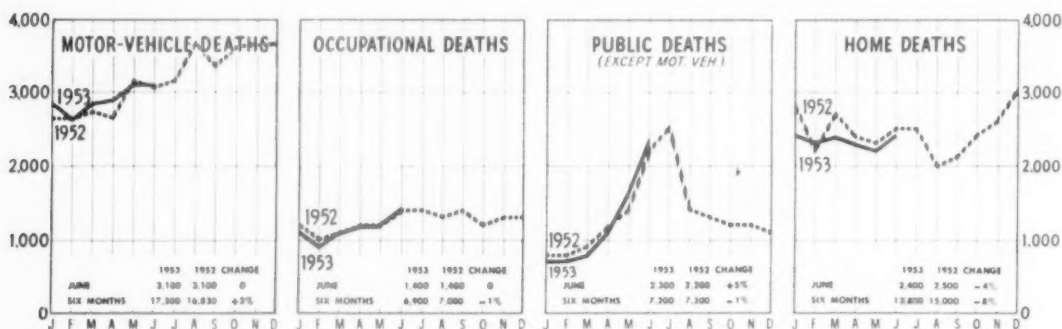
Public non-motor-vehicle accidents in June resulted in approximately 2,300 deaths, or 100 more than in June a year ago.

Deaths during the six months totaled 7,200, a reduction of 1 per cent from last year. Decreases in deaths from firearms accidents, falls and unclassified public accidents were nearly offset by increases in deaths from burns and transportation accidents. Increases were recorded for children under 15 years old and young people 15 to 24 years of age. Other age groups showed decreases with the largest change recorded for persons 45 to 64 years old.

Home Deaths

Deaths from home accidents numbered about 2,400, a reduction of 4 per cent from June, 1952.

The January-June total was 13,800, a decrease of 8 per cent from last year. There were moderate reductions in deaths from mechanical suffocation, poisonings and burns and small decreases in fatal falls and firearms accidents. All age groups showed some reduction from last year with the greatest improvement recorded for persons 25 to 44 years of age.





**Hexachlorophene in Formula #99 Antiseptic Soap
cuts absenteeism by combating dermatitis and infections**

Dermatitis steals thousands of man-hours from industry yearly. A small cut becomes infected, and a day is lost; an abrasion turns ugly, and three days are gone. Many of these cases of dermatitis are due directly to skin bacteria that cause infection—and protection against these bacteria means lower absenteeism. You can provide effective protection against infection by specifying Formula #99 Liquid Antiseptic Soap for your washrooms.

Formula #99 contains Hexachlorophene—the first germicidal agent ever found that keeps its antiseptic power in soap. Because of its Hexachlorophene content, regular daily washing with Formula #99 removes up to 95% of skin bacteria.

Ordinary washroom soaps don't have this antiseptic power. They leave the bacteria which can aggravate any small cut, skin irritation or abrasion into a case of dermatitis. And, to help replace natural skin oils, Formula #99 is *lanolated*—another advantage not found in the usual washroom soap.

Send the coupon today for further information and samples. See for yourself how Formula #99 can save man-hours by combating dermatitis.

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☐ Sample of Formula #99 Liquid Antiseptic Soap

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Cases for Comment

Compiled by **ROBERT D. GIDEL**,

Senior Engineer, Industrial Department, National Safety Council.

Self Instruction Doesn't Pay

The duties of a vulcanizer helper required him to help load and unload vulcanizers, and perform other duties in connection with vulcanizer operations. In the area where these vulcanizers were located, there were also lead strippers used to strip lead coating from cable after the curing operation. The operator of one of these lead strippers which was in operation, shut his stripper down and went to the smoking area.

Shortly afterwards, the lead stripper operator heard a cry and saw the vulcanizer helper at his lead stripper machine screaming for help. The lead stripper operator ran to his machine and found the vulcanizer helper with three fingers of his left hand caught in the inrunning rolls of the stripper. The stripper operator immediately turned the rolls open and released the victim. The injured sustained lacerations and contusions of the first, second and third fingers of his left hand, resulting in amputation of the first finger at the second joint.

None of the injured worker's assignments called for him to have anything at all to do with this machine. The injured stated that he was trying to practice on this machine as he knew there would be openings eventually for stripper operators and he wanted to get some experience. He said he had done it several times before but had never been seen by any supervisor or foreman. He had not been assigned to the stripper as a trainee. His fingers were caught in the rolls since he had his fingers extended instead of using a closed fist.

The company asked whether this should be considered an industrial injury.

The Committee decided this injury should be included in the

company's industrial injury rates. Members agreed this was definitely a borderline case, but came to the conclusion that despite lack of company authorization at the time of the injury, this employee was engaged in a learning activity in an attempt on his part to become a more valuable employee to the company.

Would better supervisory control and instruction on the part of such employees have prevented this happening? Is it possible that some method of guarding should have been installed on these machines in order to prevent even an experienced man from being injured the same way some day?

Would it be profitable in many instances to provide training facilities for interested workers or in some way encourage employees to improve their abilities for their own and the company's benefit?

When Is a Parking Lot, a Parking Lot?

A company asked for clarification of requirements for parking lots, in paragraph 2.1.3 of the ASA Standard. This company maintained a regular parking lot for its employees, but the lot was closed on Sundays. The employee in question was required to work overtime on Sunday and, because the parking lot was closed, he drove his car into the shop yard

and parked in a place adjoining the powerhouse. This was done with the approval of the supervisor; this particular space had been designated for parking cars on Sundays when the regular lot was closed. As the employee reached the side of his car on the way home at the end of his shift, he slipped on an icy spot and fell, sustaining an injury which resulted in lost time.

The company asked if this injury should be excluded from the rates on the basis of paragraph 2.1.3 of the Standard.

The Committee finally decided that under the particular circumstances described in this case, the injury should not be included in the industrial injury rates. They further stated that because of the borderline nature of this case this particular decision should not be considered as a precedent for other cases which might appear to be similar in nature.

The question in interpretation here involved whether paragraph 2.1.3 referred to only regularly constituted parking lots and not to other places on the property where employees elect to park when the regular lot is closed. It was questioned as to whether the mere fact that this employee was permitted to park in the yard on Sundays was sufficient to bring the yard into the parking lot classification as defined in 2.1.3.

Observation Time Not Chargeable

A company asked for an interpretation of Section 3.4.3 of the ASA Standard Z16.1-1915 concerning "Hospitalization for Observation." It submitted these two examples.

In the first case, the employee was struck on the head by a casting suspended from a crane. The physician's diagnosis was, "two-inch laceration left periorbital area, deep." After examining, suturing, and dressing the wound the physician advised the patient to remain at home to watch for any residual effects. The employee lost two days from work. The physician certified that the patient could have returned to work but was kept at home to watch for

—To page 214

A COMPANY competing for an outstanding safety record wants to make sure that no accidents are wrongly charged. This can be done through ASA Standard Code Z16.1-1945. If there is any doubt as to interpretation of the Code, the Committee of Judges of the American Standards Association Sectional Committee is available to review the facts.

A few of these cases are discussed briefly in this department. It is hoped that they will aid readers not only in determining the chargeability of accidents but also in planning preventive measures.



FOAM FACTS

Published quarterly in the interests of fire protection everywhere.

NATIONAL FOAM SYSTEM, INC.

WEST CHESTER, PENNA.

Quality Control in Every Step



Assures Safe,
Fire Blanketing
Foam

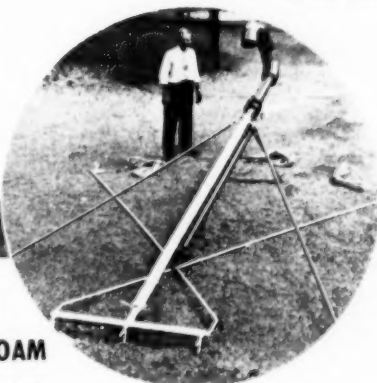
There's a difference in foam. Not all foam is good foam for the extinguishment of flammable liquid fires. Bubble size and stability are important and photomicrographs disclose major variations in foams of differing manufacture.

A rigid system of "quality control" in every step of manufacturing assures the right foam in National Aer-O-Foam. Photomicrographs of National Aer-O-Foam show a mass of uniformly small bubbles tightly knit in an unbroken blanket of fire-smothering foam that has long lasting stability.

There is a reason for this consistent, dependable quality. National Foam System controls every step of the manufacture of its foam in its own plants. Every one of the more than a dozen chemicals are pre-tested for peak quality and re-tested during processing. Finished products are then Fire-Tested for actual performance. When you buy National Aer-O-Foam you are certain of quality and Fire-Tested Protection.

NEW FOAM TOWER SAVES MANPOWER, SPEEDS TANK PROTECTION

Compact, needs Only Four
Men To Operate



QUICK CHANGE UNIT PROPORTIONS DRENCH OR FOAM

A new National Proportioner can be used either for Aer-O-Foam Liquid or National's penetrating wetting-agent, Drench. Its quick changeover feature allows fire to be brought under control with a blanket of foam and the surrounding area to be wet down to contain the fire.

The prolonged dry spells of this summer have given fire fighters the opportunity to learn about the quick effectiveness of Drench. Used as a wetting agent on Class A fires, a 1% Drench solution effects a 40% to 70% reduction in both the extinguishing time and the amount of water used.

A new portable foam tower raised and lowered by hydraulic action is now available. It can be set up in a fraction of the time formerly needed and with one-third the manpower. The same tower may be used for tanks of different heights and can easily be converted for use with chemical foam.

Quick dependable hydraulic action, which can be applied at a safe distance from the fire, raises the tower to full height in a matter of seconds. When it is elevated to a point above the upper edge of the tank wall, pressure is released and the tower gradually descends until the gooseneck is hooked over the edge of the wall. All of this is achieved hydraulically with a minimum of manpower and with less pressure than necessary for the foam system itself. Each tower is equipped with National Foam's exclusive Selective Orifice Foam Maker. Write for new data sheet 653-3-A.



By simple valve adjustment either Drench or Aer-O-Foam can be quickly proportioned in this new National Proportioner.

Get Your Copy of FOAM FACTS

For interesting facts and data on fire protection let us mail you FOAM FACTS Quarterly. Send in your request.

FOR DISTINGUISHED SERVICE



THREE types of awards for outstanding performance in industrial accident prevention are provided for in the "Plan for Recognizing Good Industrial Safety Records" adopted in January, 1952, by the Industrial Conference and the Board of Directors of the National Safety Council.

The three types of awards are:

1. **THE AWARD OF HONOR**, the highest award, replaces the Distinguished Service to Safety Award. It goes to industrial establishments whose experience meets rigorous statistical standards, even though it may not be injury-free. It also goes to those which complete 3,000,000 manhours without a disabling injury.

2. **THE AWARD OF MERIT** has similar but less exacting requirements. The standards for non-perfect records are somewhat lower, and the minimum number of injury-free manhours needed to qualify is 1,000,000.

3. **THE CERTIFICATE OF COMMENDATION** is given only for no-injury records covering a period of one or more entire calendar years and involving exposure of 200,000 to 1,000,000 manhours.

For qualifying calendar-year experience, all three types of awards are made automatically on the basis of annual reports submitted to the Council by members. The Award of Honor and the Award of Merit may also be made on special application in two types of cases.

1. Where a qualifying total of injury-free manhours is accumulated in some period other than a calendar year.

2. Where a current period of two or more years is to be used in evaluating injury rate improvement.

Publication of awards under this plan succeeds "The Honor Roll" department formerly published in the **NATIONAL SAFETY NEWS**. The foregoing is but a synopsis of the award plan. For a more complete and precise statement of eligibility requirements, members should refer to the plan itself. Details may be obtained by writing to Statistics Division, National Safety Council.

AWARDS OF HONOR

Bethlehem Steel Corp., Bethlehem, Pa., Bridgeport Quarry.

—Rankin Works.

—South San Francisco Works.

—Steelton Works.

B. F. Goodrich Chemical Co., Port Neches, Tex., Plant.

Central Vermont Railway, Division of Canadian National Railway Co., Central Vermont Line.

Clark Equipment Co., Buchanan, Mich., Buchanan Plant.

Clinton Foods, Inc., Clinton, Iowa, Corn Processing Division.

Ford Motor Co., Kansas City Aircraft Plant.

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NSC President, Ned H. Dearborn, presents the Council's Award of Honor to the Department of the Navy, which is received by the Honorable James H. Smith, Jr., Assistant Secretary of the Navy for Air. Left to right: Vice-Admiral F. C. Denebrink, Commander, Military Sea Transportation Service; Rear Admiral M. F. Schoeffel, Chief, Bureau of Ordnance; Rear Admiral Henry Crommelin, Assistant Chief of Naval Operations; General L. C. Shepherd, Jr., USMC, Commandant, Marine Corps; Rear Admiral W. McL. Hague, Commandant, Industrial College of the Armed Forces; Rear Admiral Apollo Soucek, Chief, Bureau of Aeronautics; Ned H. Dearborn; Rear Admiral C. M. Bolster, Chief, Office of Naval Research; Hon. James H. Smith, Jr.; Rear Admiral W. D. Leggett, Jr., Chief, Bureau of Ships; Rear Admiral George A. Holderness, Jr., Chief of Industrial Relations; Rear Admiral W. W. Honaker, Deputy Chief, Bureau of Supplies and Accounts; Rear Admiral H. L. Pugh, Chief, Bureau of Medicine and Surgery.

For MODERN, SANITARY WASH FIXTURES and SHOWERS



Full Circle Pre-Cast
Marble Washfountain

Up to 10 can wash
simultaneously



Full Circle Enamel Iron Washfountain,
Forest Green or White



Semi-Circular,
Wall-Type
Washfountains

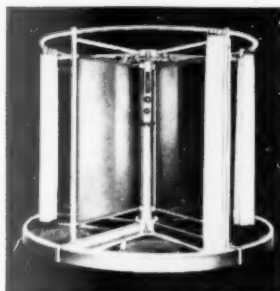
Duo (two person) Washfountain,
White or Forest Green



SPECIFY BRADLEYS

- ▶ **Maximum Sanitation**
- ▶ **Economy**
- ▶ **Preferred by Factories, Mills, Institutions, Schools**

5-Stall Bradley
Shower



Bradley Shower
without partitions



Write for
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During the past 30 years, Bradleys have become recognized as providing economical, adequate and top sanitary washing facilities. Bradley Washfountains serve clean running water from a central spray-head to groups up to 10 washing simultaneously. The self-flushing bowl prevents collection of contaminating water and with foot-control, faucets and faucet contacts are eliminated. Space is saved, water consumption cut 70%, and piping connections 80%.

Bradley Multi-person Shower Units are compact, easily installed and require only two water connections (hot and cold) and one drain for up to five stalls.

If your washing facilities are not modern or adequate, let a Bradley man make a recommendation now.

BRADLEY WASHFOUNTAIN CO.

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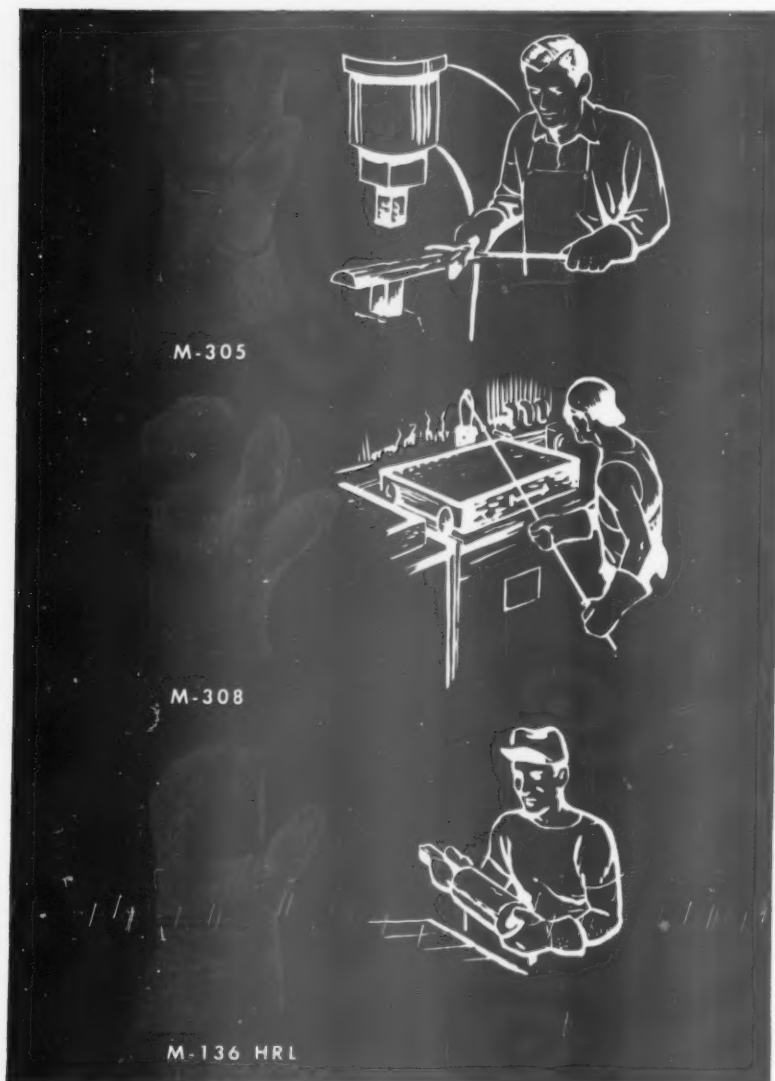
BRADLEY
*washfountains
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NEW RED JOMAC[®] FLAMEPROOF MITTS

These new red Jomac Mitts can easily be identified by supervisory personnel to insure the use of the correct mitt and thereby prevent injuries. Distinctive color also provides positive identification and speeds issuance from the stockroom.

WRITE FOR LITERATURE ON THIS NEW LINE OF RED JOMAC FLAMEPROOF MITTS—SAMPLES AND PRICES UPON REQUEST



C. WALKER JONES CO. • PHILADELPHIA 38, PA.
Plants in Philadelphia, Pennsylvania and Warsaw, Indiana

Signed Up for Safety

From page 117

contains materials for both management use and worker distribution. For instance, representative subjects for monthly kits for hardware dealer associations are housekeeping, premises hazards, eye hazards, material handling, and vehicle operation. This schedule may be interrupted if special kits are needed because of seasonal or special developments.

As an example of the materials provided, in the month devoted to housekeeping, the following are sent:

1. *For Management or Supervisors:*
A four page pamphlet, in color, designed for the hardware dealer and containing an inspection check list and illustrations of conditions affecting housekeeping.
2. *For Worker Distributions:* Posters on the subject of housekeeping and handout or payroll enclosure leaflets dealing with the same subject.

Supplementary Materials

Typical of additional materials provided to the association for distribution to its members as a part of the program are the following:

1. First aid booklets.
2. Miscellaneous safety signs.
3. Loss Prevention standards (data sheets) affecting the industry.
4. Newsletters containing data on accident and fire prevention problems of the industry.

Hardware Mutuals also provide consulting services on loss prevention to each association enrolling in the program.

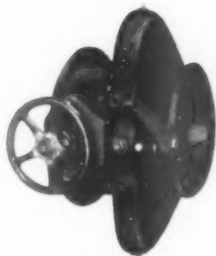
Consulting and other services, as well as selected loss prevention materials, are made available to participating associations as a public service at no cost to the association or its members even though no insurance is carried by Hardware Mutuals. The only expense to the association is the minor cost of promoting the project with its members, keeping interest in it at a high level, and distributing materials from its office. The sole purpose of these safety programs for retail hardware and implement dealer associations is to provide smaller businesses with a practical service by which deaths and injuries from accidents and fires may be prevented.

**GOGGLE PLATE
FREES *Instantly***

**REGARDLESS OF TIME
BETWEEN OPERATIONS**



60" x 48" Bailey Valve for horizontal gas main.



Totally enclosed type Bailey Valve for 6" diameter gas main.

Bailey

**Mechanical
GOGGLE
VALVES**

No matter how long they remain unused, you can count on these valves to provide the tight, positive seal needed for shutting off gas mains in emergencies or for repairs. Requiring a minimum of maintenance, Bailey Mechanical Goggle Valves operate by a powerful clamping force which is applied equally to all points around the disc periphery. The goggle plate is freed by the same powerful mechanism. The safety and dependability of these valves have been thoroughly proved in service in gas washers, gas mains, coke plants and boiler plants. Available in sizes from 6" to 72", totally enclosed if desired.



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PITTSBURGH 16, PA

GREEN CROSS NEWS



Activities of Local Safety Councils and Chapters

Compiled by TOM A. BURNES

Director of Local Safety Programs, Field Organizations, NSC

Plans for Managers' Meeting Get Underway

ON FRIDAY AND SATURDAY, October 16 and 17, the Annual Meeting of Safety Council Managers will be held in the South Ballroom, third floor, Conrad Hilton Hotel, Chicago. More than 100 managers from 43 states will be in attendance for this bigger-than-ever meeting. Among matters of vital importance to be discussed will be the new Federal Charter of the National Safety Council, and the implications of the Charter to the Chapters.

[At the request of a number of managers, several nationally recognized figures in the field of traffic control will participate in the discussion of the area of responsibility of local and state safety organizations in traffic facilitation and safety.

One of the outstanding features of the National Institute for Safety Council Administration, held in Chicago last March, was the presentation of step-by-step procedures in conducting a community fund raising program for local safety organizations. This presentation will be expanded for the benefit of all managers. Of considerable interest to all will be a report on the recent developments in devising a national campaign for funds.

On Friday a luncheon will be held for managers at 12:30 in the West Ballroom, third floor, which will feature the annual presentation of Special Achievement Awards to State and local safety organizations. Robert R. Snodgrass, Vice President for Local Safety Organizations, will be the

speaker. A reception for managers will be held at 5:30 p.m. in the West Ballroom of the Conrad Hilton on Saturday.

The meeting of the Conference of Local Safety Organizations will be held Monday, October 19 at 2:00 p.m. in the Chicago Room of the La Salle Hotel, Madison and La Salle Streets. This Conference meeting will be followed by the reception and banquet for managers and presidents, in the Illinois Room, La Salle Hotel, at 6:00 p.m.

Aids in Disaster Relief

When Worcester, Mass., experienced the terrible tornado disaster on June 9, the Worcester County Safety Council put all regular work aside and offered its staff, facilities and volunteer workers to help out in the big rehabilitation program that started immediately.

Headquarters were established in the Council offices and Manager John Greene directed the job of collecting funds. More than \$1,000,000 was raised and at last reports the money was still coming in. The Council staff was thanked publicly by Relief Chairman George F. Booth, who said: "We owe a deep debt of gratitude to the Safety Council for its generous donation of staff and office facilities and for providing headquarters for the work of the Central Massachusetts Disaster Committee."

The Council News Letter missed one issue but came back strong recently with a six-page printed edition, featuring two pages of tornado wreckage snapshots, most of which were taken by Manager Greene and Mrs. Greene. The pictures tell a dramatic story of

wholesale destruction with 24 different photos in the two-page spread. Latest reports from the stricken city indicate that the Safety Council activities are back once again on an even keel.

New Manager for Pasadena

Lester G. Bock, retired Navy captain and lecturer in mechanical engineering at the University of Southern California since his retirement from the Navy, has accepted the post of managing director of the Pasadena Chapter of NSC. Born and reared in Illinois, Bock entered the Navy as a Reserve lieutenant in World War I and remained until his retirement, after 30 years, in 1947. He is a graduate of Columbia University, N.Y., with a master's degree in mechanical engineering. He was machinery superintendent at Pearl Harbor, in charge of 25,000 civilian personnel, on December 7, 1941 when the Japanese launched their attack. He and Mrs. Bock have resided in Altadena for the past several years.

Al Wood Is San Jose Manager

Albert H. Wood, former president of the Kansas City Safety Council and a member of the board of directors and executive committee for many years, who recently located in California, has accepted the post of manager of the Santa Clara County Chapter of NSC, with headquarters in San Jose. Mr. Wood enters the management field with a wealth of promotional experience and a fine knowledge of safety council problems and what to do about them. He was a civic leader in Kansas City for many

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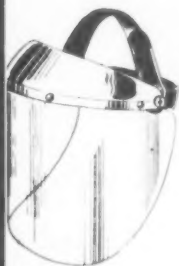
SERIES 1110
FACE SHIELD



SAFETY

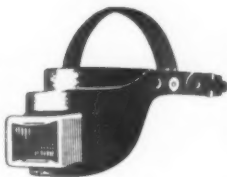
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Whether for work or inspection there is a specific Dockson model made to give your operators dependable safety. Write us today for a complete catalog of Dockson Head and Eye Protection.

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—TERENCE

Going to the Congress?

EACH YEAR a hundred thousand conventions are held in the United States and several million people go to them. Most of them spend the time more or less profitably—Some ideas are sure to soak in. But how many get the most out of attendance?

Much attention has been given to putting ideas into conventions; much less effort has been spent on getting ideas out of them. Attending a convention profitably is hard work. It calls for a variety of skills, plus exhausting concentration.

By this time those who are planning to attend the 41st National Safety Congress have received copies of the preliminary Congress program. Many have already picked speeches and sessions they want to take in.

When you get into a meeting, participate. That means more than just warming a chair. Alert listening breeds questions; ask them during the discussion period. Don't worry about appearing ignorant; you'll have lots of company. You may get people thinking about your problems. Helpful ideas have a way of popping out of unexpected places.

Maybe you'll have something to contribute. At any rate, you'll get practice in talking before a crowd.

Often you hear fellows say they get more out of the bull sessions than they do from the regular meetings. That shouldn't be taken too literally but informal discussions can be valuable. So, in between sessions, circulate. Talk to people, and listen, too.

At a convention, as at home, you have to eat approximately three times a day, and here's another chance to get acquainted with people. After a round of speeches and discussions you may feel like slipping away for a few quiet moments by yourself. But having lunch with someone can be both relaxing and profitable. And don't spend all the time at the Congress with people from your own company.

Be on the lookout for new contacts, for unfamiliar ideas. At a convention people come together for a purpose. If you avoid them you miss that purpose.

In meetings, a notebook is the delegate's best friend. Without it, those good ideas you heard will

be gone by next morning. Jot down new information, where to go for further data, names, addresses, pithy comments. It will keep them on record and fix them in your memory.

Of course, you won't overlook the Exposition. It's a fascinating place to browse. There are ideas to be found there, as well as in the meetings. You will find the latest developments in safety equipment and you will get acquainted with men who can help you with some of your problems.

When you get back home your part in the Congress hasn't ended. Your boss may not ask for a report but it's a good plan to write him one anyway. He may not read it thoroughly but at least it will show him you've been on the job.

Make a concise list of the ideas you've collected. Summarize those points which are important to the company and in your own work. Make it as practical as possible.

When you've submitted your report, passed on ideas to others who can use them, and followed through on things you can do something about, then you've really attended a Congress.

* * *

P. S.—Our minister recently admitted that he frequently dug old sermons out of the barrel. Well, editors warm up old pieces, too. The above was used in the S-V several years ago. It was adapted from something that appeared in Forbes Magazine.

In This Issue

THE SUBJECT of this month's cover was important enough to make us change our minds after we had ordered the plates. We'd like to be able to say that this picture showed President Eisenhower signing the bill granting the Council a federal charter. Actually, he signed it next day. It is reported that he was wearing a different suit but otherwise there was little change in the scenery.

* * *

If the founding fathers of the safety movement had realized the significance of their work, they would undoubtedly have left more complete records for the Council archives. Transactions of early safety congresses and previously published articles provided most of the material for this article but many interesting sidelights on the Council's history were never recorded. (Page 108)

* * *

"How can I win an award?" many a member of the Council asks himself or the Council. Statistician Norman Mozley tells what it takes. (Page 114).

Carman Fish

"RUBBERHIDE"

Safety INNERSOLES

FOR RUBBER WORK SHOES AND BOOTS

"RUBBERHIDE" Safety Innersoles provide low-cost maximum protection against foot injuries due to punctures by nails or other sharp-pointed underfoot objects. They make rubber shoes and boots more thoroughly *punctureproof* than the heaviest leather soles, and will last longer than the shoes and boots themselves.



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 . . . even when jumped on! This protection means actual **SAVINGS . . .** eliminates lost time because of foot injuries . . . contributes to lower compensation insurance rates.



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COMING EVENTS



In the Field of Safety

Oct. 19-23, Chicago

Forty-first National Safety Congress and Exposition (Conrad Hilton Hotel). R. L. Forney, general secretary, National Safety Council, 425 N. Michigan Ave., Chicago 11.

Nov. 9-13, New York

American Public Health Assn., 81st Annual Meeting. (Hotels Statler and New Yorker). Dr. Reginald M. Atwater, executive secretary, APHA, 1790 Broadway, New York.

Nov. 17-18, Cincinnati, Ohio

Third Annual Greater Cincinnati Safety Conference (Sheraton-Gibson Hotel). Kenneth R. Miller, executive director, Greater Cincinnati Safety Council, 1203 Federal Reserve Bank Building, Cincinnati 2, Ohio.

Nov. 19, Fort Worth, Tex.

Ninth Annual Industrial Institute, sponsored by Fort Worth Safety Council and Fort Worth Chapter, ASSE. (Hotel Texas). L. W. Graff, safety director, Fort Worth Safety Council, Majestic Bldg., Fort Worth 2, Tex.

Dec. 4, Oakland, Calif.

Annual Eastbay Area Traffic Safety Conference. C. W. Dreyer, Green Cross, 353 15th St., Oakland, Calif.

Dec. 7-8, New Orleans, La.

Louisiana Safety Conference (Roosevelt Hotel). Charles E. Doerler, conference secretary. Address c/o Caddo Bossier Safety Council, Inc., 610 Edwards St., Box 806, Shreveport, La.

Feb. 10, Dayton, Ohio

Second Annual Miami Valley Safety Conference. (Biltmore Hotel). Marvin Purk, manager, Safety Council, Dayton Chamber of Commerce, Biltmore Hotel, Dayton 2, Ohio.

Mar. 7-9, Louisville, Ky.

Southern Safety Conference and Exposition. (Kentucky Hotel). W. L. Groth, executive director, P. O. Box 8927, Richmond 25, Va.

March 10-11, Philadelphia, Pa.

Twentieth Annual Philadelphia Regional Safety and Fire Conference and Exhibit (Bellevue-Stratford Hotel). Walter W. Matthews, managing director, Philadelphia Chamber of Commerce Safety Council, Architects Building, 17th and Sansom Sts., Philadelphia, 3.

Mar. 17-18, Indianapolis, Ind

Central Indiana Safety Conference and Exhibit. (Claypool Hotel). Jack E. Gunnell, director, Indianapolis Safe-

Bearfoot

NEOPRENE SOLES

Registered U.S. Patent Office

make the soling of
safety shoes as important
as the protective toes

...a type for every need

neoprene — a synthetic rubber made from acetylene, sulfuric acid and salt—possesses remarkable characteristics that have revolutionized work shoe and safety shoe service and comfort. However, Neoprene is used in shoe bottoms in different forms and in combination with other substances. These different kinds of "Neoprene" have different performance features to fit different needs, and picking the right type of "Neoprene" sole means increased customer satisfaction.

Type "S" Neoprene gives by far the greatest wear and protection under the most punishing conditions in which work shoes are used. Type "S" Neoprene is produced by E. I. du Pont de Nemours & Co. and is fabricated by The Bearfoot Sole Co., using an exclusive process, into the first* and only practical sole made of this material.

Neoprene-Nitrocrepe,** also made by Bearfoot, is a micro-cellular shoe bottom wherein different forms of Neoprene are used to make a thicker, lighter sole having the soft, cushiony comfort of regular Nitrocrepe. Some of the heavy-duty advantages of Type "S" Neoprene are sacrificed in obtaining a soft, cushiony work sole for those industries where shoe bottoms do not take extreme abuse.

oils and chemicals By their very chemical nature, neither of these Bearfoot products is subject to the usual deterioration from contact with sunlight, oxygen, oils, greases, most acids and industrial chemicals. Besides the safety factor involved, this characteristic results in remarkable long service life for both of these soles in fields where conventional soles may deteriorate rapidly.

heat Both Bearfoot Type "S" Neoprene and Bearfoot Neoprene-

Nitrocrepe provide excellent insulation for the foot against temperature extremes. In addition to this important protection for the wearer, these materials do not break down under heat, again giving an indefinitely long service life in foundries, road-building and roofing work and other industries where high temperatures destroy shoe bottoms quickly.

wear, abrasion, cutting Bearfoot Neoprene-Nitrocrepe will outwear any other micro-cellular soling material known to us. Type "S" Neoprene, which has phenomenal resistance to wear, abrasion and cutting under any conditions of use, outwears any other soling material of any kind known to us. This results in substantial money savings to buyers of work and safety shoes in fields where soles take a lot of punishment. Also, through its high density and toughness, Type "S" Neoprene is highly resistant to cutting,

giving extra protection and longer wear in industries where sharp grit and hot or cold metal chips cut ordinary soles to ribbons.

slippage Both types of Bearfoot Neoprene soling offer superb protection against slippage. Laboratory tests—made on many different flooring surfaces, both dry and coated with water, oil and other substances—show Type "S" Neoprene has a squeegee action that cuts slipping, gives sure-footed traction.

style and comfort Both types of Bearfoot Neoprene are fully flexible, are supplied in attractive colors, maintain their shape and profile edge indefinitely without spreading or deterioration. Bearfoot Neoprene-Nitrocrepe is a micro-cellular sole, containing countless perfect little nitrogen "bubbles" which give this material its characteristic light weight, soft floating comfort and massive good looks.

pick the right sole Both these fine soles are designed for use on safety and work shoes. Bearfoot Neoprene-Nitrocrepe features light weight, massive good looks and cushiony comfort. Bearfoot Type "S" Neoprene features long wear, excellent slippage resistance and high resistance to the cutting and abrasive effect of sharp grit, chips and filings. Samples and full specifications on both these premium materials are available on request.

*Confirmed by E. I. du Pont de Nemours & Co., Jan. 23, 1952.

**Bearfoot Neoprene-Nitrocrepe, due to its soft cushiony properties, must be cement-bonded to the bottom of the shoe. Bearfoot micro-cellular Neoprene soling in a denser form for stitched-sole construction and lower cost is also available under the name of Bearfoot Neoprene-Aircushion.

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ty Council, 320 N. Meridian St., Indianapolis 11, Ind.

Mar. 30-Apr. 1, Pittsburgh, Pa.

Twenty-ninth Annual Western Pennsylvania Safety Engineering Conference and Exhibit. (Hotel William Penn). Harry H. Brainerd, executive manager, Western Pennsylvania Safety Council, 605 Park Bldg., Pittsburgh 22, Pa.

Apr. 6-9, New York

Twenty-fourth Annual Greater New York Safety Conference and Exposition. (Statler Hotel). Paul F. Stricker, executive vice-president, Greater New York Safety Council, 60 East 42nd St., New York 17.

April 14-16, Charleston, W. Va.

Twentieth Annual West Virginia Statewide Safety Conference. Charles Hopkins, managing director, West Virginia Safety Council, Inc., 316-17 Masonic Building, Charleston 1, W. Va.

Apr. 20-22, Detroit, Mich.

Michigan Safety Conference. (Sheraton-Cadillac Hotel). Jerry E. Moore, executive secretary, c/o Corporate Service Inc., 2210 Park Ave., Detroit 1, Mich.

May 4-6, Raleigh, N. C.

Twenty-Fourth Annual North Carolina Statewide Industrial Safety Conference (Sir Walter Hotel). H. S. Baucom, safety director, North Carolina Industrial Commission, Raleigh.

May 6-7, Baltimore, Md.

Annual Governor's Safety-Health Conference and Exhibit. (Lord Baltimore Hotel). Joseph A. Haller, director of safety, State Industrial Accident Commission, Equitable Bldg., Baltimore 2, Md.

Help Wanted!

Poorly guarded machinery is the special target of the Mechanical Guarding Committee of the National Safety Council's Industrial Conference. Members of the committee have talked it up with the machinery manufacturers.

Many machinery builders do the best job they can. Conflicting state laws and competitive market conditions make things tough for them.

If you have bought machinery within the past five years that:

Had no guards at all, or
Needed more guards to make it safe let the committee know about it.

The committee badly needs the ammunition YOU can give. You will not become personally involved in the problem, but do write your experience with this problem to:

Mechanical Guarding Committee
Industrial Conference
National Safety Council
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Chicago 11.

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Books, Pamphlets and Periodicals of Interest
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Compiled by Ruth Parks, Librarian, NSC

BOOKS AND PAMPHLETS

Atomic Energy Hazards

Biological Hazards of Atomic Energy. Being the Papers Read at the Conference Convened by the Institute of Biology and the Atomic Scientists Association, October 1950. Edited by A. Haddow, Oxford University Press, New York, 1952. 235 p. \$9.00.

The present volume is a collection of 25 papers read at a symposium in England held just three years ago. The information reported is, of course, much older. It is difficult, therefore, to evaluate the information presented because it must be assumed that many of the problems are much closer to a solution now than they were three or four years ago.

As far as the safety engineer is concerned, the volume does not present the kind of information which will enable him to anticipate or deal with radiation hazards. These must always be the province of the specialist. The book doesn't even make a good introduction to the biological hazards of radiant energy. No collection of papers by 25 different people, loosely edited and poorly written as this is could possibly serve that purpose.

What the book does do, and do quite well if one wants to study it, is present a rather terrifying picture of the scope of the problems science must face and solve if it is to make radiant energy a safe tool for medicine and industry.

Accident Statistics

Work Injuries in the United States During 1951. Published by U. S. Bureau of Labor Statistics, 1953. 41p. For sale by the Superintendent of Documents, Wash-

ington 25, D. C. 25c. (Bulletin No. 1137).

Aeronautics

Aircraft Safety Belts: Their Injury Effects on the Human Body. By Hugh de Haven. Published by Cornell University, Medical College, 1300 York Ave., New York 21. 1953. 55p. (*Crash Injury Report*, July 1953.)

Comparison of Accidents in U. S. Scheduled Air Carrier Passenger Operations. Calendar years 1951-1952. Published by Civil Aeronautics Board, Washington 25, D. C. 1953. 19p.

Chemicals

Hydrogen Peroxide. Published by Manufacturing Chemists' Association, 246 Woodward Bldg., Washington 5, D. C. 1953. 17p. 25c. (*Chemical Safety Data Sheet* SD-53.)

Sulfur Dioxide. Published by Manufacturing Chemists' Association, 246 Woodward Bldg., Washington 5, D. C. 1953. 15p. 25c. (*Chemical Safety Data Sheet* SD-52.)

Electrical Industry

Transformer Installations Safeguarding Against Fire. Published by Factory Mutual Engineering Division, 134 High Street, Boston 10, Mass. 1953. 8p. 15c. (*Loss Prevention Bulletin* No. 15:30.)

Engineers

Where Is Your Safety Engineer? Research Report of the Special Committee on the organizational position of the Industrial Safety Engineer. Published by The Society for Advancement of Management, 74 Fifth Avenue, New York 11. 1953. 30p. \$1.00.

Fire Protection

Fire Safeguarding Warehouses. Published by National Board of Fire Underwriters, 85 John Street, New York 38. 1953. 47p. Free.

Guards

Mr. Manager . . . Guard Your Investment in Manpower. Published by U. S. Bureau of Labor Standards, Washington 25, D. C. 1953. 12p. Free. (Bulletin No. 164.)

Mines

Coal-Mine Explosions and Coal—and Metal-Mine Fire in the United States in 1950, 1951, 1952. Published by U. S. Bureau of Mines, 1953. 13p. Available from The Bureau, Publications Distribution Section, 4800 Forbes Street, Pittsburgh 13, Pa. Free. (*Information Circular* No. 7661.)

Fire-Fighting Equipment in Coal Mines—Selection, Placement and Care. Published by U. S. Bureau of Mines, 1953. 20p. Available from The Bureau, Publications Section, 4800 Forbes Street, Pittsburgh 13, Pa. Free. (*Information Circular* 7662.)

Piping

Code for Pressure Piping, Supplement NO1 to ASA B31.1—1951. Published by American Society of Mechanical Engineers, 29 West 39th Street, New York 18. 1953. 24p. \$1.00. (ASA B31.1a—1953.)

MAGAZINE ARTICLES

Accident Records

Easy to Keep Records. Tell Exactly How Much Accidents Cost Us. By H. K. Hilton. *Factory Management and Maintenance*. August, 1953. p. 34.

Falls

Watch That First Step. Meat. August, 1953. p. 32.

Goggles

The Eyes Have It. By R. M. Edmiston. *Supervision*. August, 1953, p. 20.

Health

Occupational Health Program as a Local Health Officer's Opportunity.—To page 225



Two Handling Problems Solved with Bethlehem Slings

Shown here are two entirely different kinds of loads, but in each case the handling problem was simplified by using Bethlehem slings.

The small lift is of a type that occurs many times each week at the factory in question. The loads are fairly light, and the wire rope slings are small, though of Purple Strand (improved plow) grade. The ones in the picture had been in service for more than a year when the photo was taken. Note their excellent condition.

Naturally, much larger, stronger slings are required for loads like the bulky forging. That big fellow weighed 58 tons, and the rigging included two eight-part braided slings and two heavy grommets, plus the

necessary end-fittings and hooks. The Bethlehem slings selected for this lift had a load capacity far in excess of the tonnage involved.

Almost every lift creates its own problems, and some are highly technical in nature. But, whatever your needs, there is always a Bethlehem sling—or combination of slings—for the job. Bethlehem makes every size and type, and can readily furnish you just what you want.

In cases of doubt, by all means call for one of our engineers. He will study your layout, check the lifts you make, and recommend the proper slings for each and every job. It is the kind of survey you can depend upon for best results at lowest cost.



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On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation
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New York Green Cross to Repeat Colorful Parade



Walter C. Smith (left) chairman of the Executive Committee of the Greater New York Safety Council, displays a sketch of one of the floats to be used in the Green Cross Safety Parade to Mayor Impellitteri (center) and W.S.S. Rodgers (right) chairman of Trustees of the National Safety Council. The pageant is scheduled for a Fifth Avenue presentation on October 17. Mayor Impellitteri has accepted the post of Honorary Grand Marshal.

MORE than 3,000 marchers, 23 bands, 18 floats, 50 special vehicles and other display units will swing down New York's Fifth Avenue on Saturday afternoon, October 17, when the second annual New York Green Cross Safety Parade, sponsored by the National Safety Council and the Greater New York Safety Council, starts on its 33-block route.

Drawing on experience gained in last year's "Two Miles of Safety," the parade committee, headed by W. S. S. Rodgers, chairman of the Trustees of the National Safety Council, has already enlisted greater general support throughout the city for this year's parade and anticipates a far larger audience than the 100,000 who viewed the initial march in 1952.

The parade, designed to give dramatic impact to safety practices and problems in the world's largest city, will be made up of 70 units

representing major city departments, federal agencies, the armed forces, public utilities, civil defense, fraternal, civic, and service organizations as well as New York industries and business organizations, educational and religious groups.

The decision to repeat last year's successful parade was announced early in August in a joint statement by Mayor Vincent R. Impellitteri, W. S. S. Rodgers of the National Safety Council and Walter C. Smith, chairman of the Executive Committee of the Greater New York Safety Council following a meeting in the Mayor's office.

Mayor Impellitteri is again serving this year as Honorary Grand Marshal and will review the parade with Ned H. Dearborn, president of the National Safety Council and Reginald M. Cleveland, president of the Greater New York Safety Council. Robert Moses,

Commissioner of Parks and City Construction Co-Ordinator will lead the march as grand marshal.

The New York Health Department estimates that 3,311 New Yorkers lost their lives due to accidents caused by carelessness in 1952 and 333,000 sustained serious injuries. Despite this tragic loss of life, however, the city's fatality rate of 41.1 per 100,000 was far below the national rate of 61.1. Sponsors of the parade are hopeful that the demonstration, devoted to awakening the public to the increased hazards of urban living, will serve to reduce this number even more.

The Sponsoring Committee

Mayor Impellitteri has agreed to serve as Honorary Grand Marshal of this year's parade, as he did in the last, and the following have consented to serve as members of the Sponsoring Committee for this year:

Bruce Barton, chairman, Batten, Barton, Durstine & Osborn, Inc.

Elmer H. Bobst, president, Warner-Hudnut, Inc.

Arthur H. Bunker, president, Climax Molybdenum Co.

George D. Busher, president, Bronx Board of Trade.

Alexander Calder, president, Union Bag & Paper Corp.

Curtis E. Calder, chairman, Electric Bond & Share Co.

James S. Carson, president, Avenue of the Americas Association.

Bennett A. Cerf, president, Random House, Inc.

William G. Chandler, president, Scripps-Howard Supply Co.

John Thomas Clancy, president, Chamber of Commerce, Borough of Queens.

Carle C. Conway, chairman, Executive Committee, Continental Can Co., Inc.

Charles R. Cox, president, Kennecott Copper Corp.

Cleo F. Craig, president, American Telephone & Telegraph Co.

Cleveland E. Dodge, vice president, Phelps Dodge Corp.

Bishop Horace W. B. Donegan, Bishop of New York, Episcopal Church.

Charles E. Dunlap, president, Berwind-White Coal Mining Co.

J. M. Elliott, president, Alexander Smith, Inc.

To page 200



43% of all businesses shut
down by fire are now as
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customers lost. Better protect
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fully AUTOMATIC CO₂ Fire
Extinguishing System.

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Walter Kidde & Company of Canada, Ltd., Montreal, P. Q.

*According to a survey by the Safe Manufacturers' National Association

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Walter Kidde & Company, Inc. and its associated companies.





Contestant negotiating diminishing clearance test.



Bill Jordon, of Alaska Pine Company, was the winner of the carrier contest. His wife and daughter were equally proud of the trophy.

Carrier Drivers Show Their Skill

By W. M. ALLISON

SPIRITED AND SKILLFUL competition marked the Carrier Driver's Contest, recently conducted at the Universal Lumber and Box Company Ltd., in Vancouver, British Columbia. Drivers were tested on their safety attitude as well as driving skill. The tests were intended to spotlight hazards encountered in daily plant operations, where vehicles must be driven in an area where men are working. Three winners were selected from the 17 carrier operators who took the test. The entire group scored well, and it wasn't easy for the judges to pick a trio of winners.

The plant had been the scene of many serious accidents, including

W. M. (SCOTTY) ALLISON is Safety Director for the British Columbia Lumber Manufacturers Association, Vancouver, B. C.

four fatalities since 1946. Each mishap was contributed to by driving carriers unsafely or trying to pick up a load with a workman standing in front of the vehicle. The tests were all designed to improve carrier driving from a safety viewpoint.

It has been our experience that the drivers of in-plant vehicles seem to consider themselves a group apart from other employees. The usual safety programs and campaigns of course included these drivers, but nothing had been specifically done to create and maintain their interest safety-wise. Further, any unsafe practices in the handling of vehicles exposed many men to the danger of injury. With these and other thoughts in mind, the carrier drivers' contest was organized.

This contest consisted of each

driver completing 10 different tests.

TEST NO. 1: Contestant was expected to check his machine before starting as he would normally at the starting of his shift. 100 points were allotted for a complete check, deductions for items missed.

TEST NO. 2: This was a pick-up of a 40-foot timber which was sitting on carrier blocks, travel approximately 400 yards, set the timber down with the front end exactly on a given marker. Points were deducted for inches under or over the line. He then picked up the same timber and in reverse, traveled to the starting line, sitting it down on another marker and again marked as for the forward travel.

TEST NO. 3: The driver had to pick up the center load of three loads in line, take the load out from between the two, turn the vehicle around, back the load setting it in exactly the same spot as he found it. Points were deducted for inches he was out forward or sideways. A possible 100 points was allotted for this test.

TEST NO. 4: There were five full loads exactly in line and each load 36 inches apart. The driver had to move these five loads a distance of 50 yards and leave them exactly in line and each load

—To page 162



How to put **SAFETY** on every worker's lips

You can't repeat your safety messages too often. And a good way to get in several extra licks a day is to use Continental's Safety Slogan hot drink cups. Each attractive cup delivers two practical safety messages that are brief, right to the point, and not a bit preachy. And these messages reach your worker at snack or meal times when he is relaxed and friendly.

QUICK DATA: Safety slogan cups are available in 6-, 8-, and 12-oz. sizes. Made of virgin pulp with double-wrapped sidewalls that won't leak... keep hot liquids really hot. Series of three cups (two messages to each cup) packed in rotation for variety.

Safety engineers from many plants where Safety Slogan cups are regularly used tell us these little messages from "Oscar the Life-Guard" are particularly acceptable to workers.

They can help you put your points across too. Ask your paper jobber for full details or write Continental today.

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Solvent Degreasers

(From page 129)

also important. The degreaser should be large enough to operate economically for the size and volume of parts to be cleaned. Much trouble has been experienced when users have attempted to exceed the capacity of the unit—either in volume of work put through or size of parts to be cleaned. Such practice leads to high vapor exposures because each time the machine is overloaded, the solvent vapor level is lowered. Then, when the work is removed from the degreaser, air saturated with solvent vapor is forced into the area as the vapor

returns. This misuse of a degreaser is called a "pumping action."

Location of Degreaser

The degreaser should be located where it is not subject to any cross-drafts. It should be placed in a large, well-ventilated room (20,000 cubic feet or larger). If the room has windows, in most cases the natural draft infiltration will be satisfactory. In basements and rooms without windows, mechanical ventilation, providing at least five air changes per hour, should be provided.

A well-designed and operated degreaser, properly located, conserves solvent by retaining it within the tank. Solvent vapors are condensed into droplets which fall back into the boiling chamber. Because the vapors are 4.5 times heavier than air, a definite vapor level can easily be maintained. Cross-drafts across an open degreaser set up eddy currents which swirl the vapor into the room. Greater draft velocity means greater solvent loss and increased exposure to the operator. Actual

tests as shown in Figure 5 illustrate this.³ If the machine must be located where cross-drafts prevail, a shield or baffle should be set up. Where possible, the shield should be 36 inches high although a shield as low as 12 inches can be of value in reducing solvent loss. Some machines are provided with covers which can be set up as shields.

The degreaser should not be located near open flames. Crowded work sections should also be avoided.

Height of a hand-operated degreaser above the floor level or operating platform is important and should be between 36 and 45 inches. This is to keep the operator's head well above the top edge of the machine. Concentration of solvent vapor increases rapidly as the edge of the tank is approached. (Figure 6) At breathing zone (24 inches above the edge) on this particular degreaser,

—To page 191

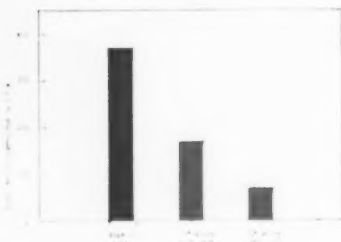


Figure 6. Concentrations at various distances from edge of tank.

Figure 7. Ventilation of boiling chamber of conveyORIZED degreaser showing fan and duct connections.

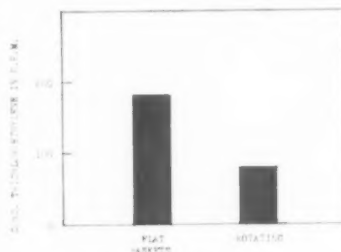
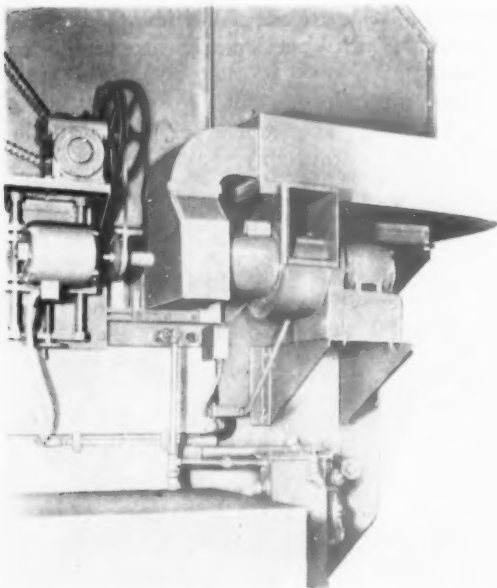


Figure 8. Improvement in drainage with use of rotating baskets.

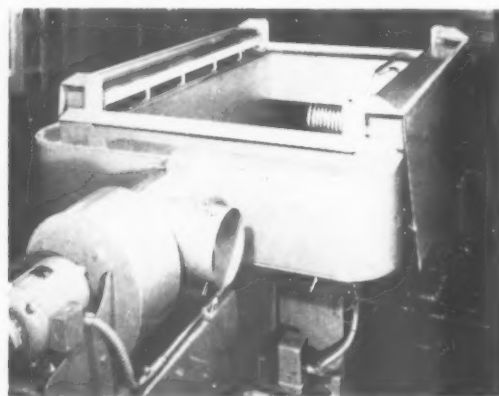


Figure 9. Slot type hood for hand-operated degreasers. Note duct connection at fan inlet for pit ventilation.

DIRTY GLASSES

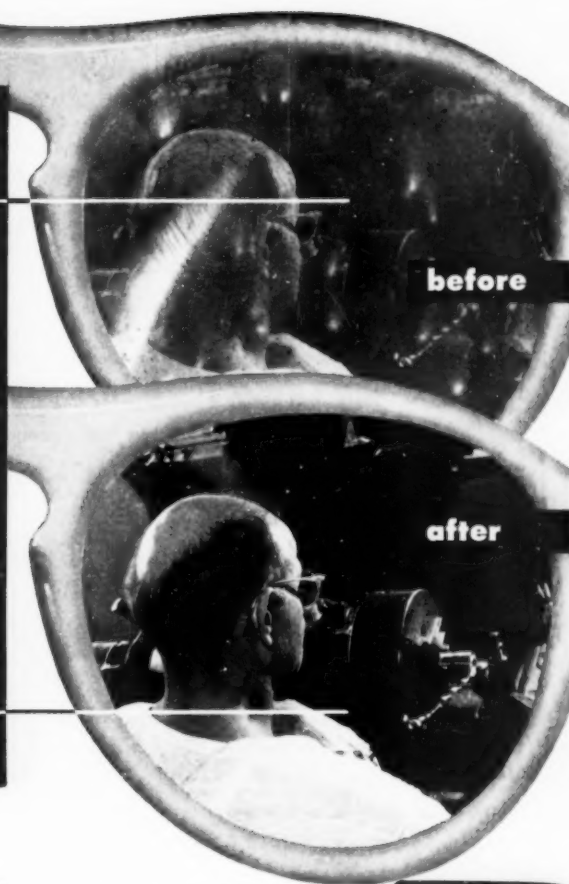
like dim lights and dull tools . . .

are DANGEROUS

Keep them clean

... with SIGHT SAVERS

the DOW CORNING SILICONE
treated tissues



Promote Your Eye-Safety Program with Sight Savers

Accidents, work spoilage, lost time directly traceable to foggy vision, cost American industry millions of dollars a year. This loss could be drastically reduced by making it easy for employees to keep eyeglasses and safety glasses clean.

Sight Saver Cleaning Stations solve this problem. There's no muss, no fuss, no fluids, no wasted time. Sight Savers encourage workmen to wear their safety glasses all the time because Sight Savers make it so easy to keep their glasses clean, and the cost is but a few cents a day.

Install SIGHT SAVER CLEANING STATIONS

Quickest and Easiest Way to Clean Glasses

SIGHT SAVERS are saturated with Dow Corning Silicones to simplify cleaning and polishing glass lenses; to give added clarity and luster; to keep dirt and oil from sticking to eye glass and safety glass lenses. Tissues are just the right size, 3" x 7"; treated both sides. And SIGHT SAVER Cleaning Stations are easily installed on metal, wood, glass or tile walls. Foolproof, permanently lubricated dispenser eliminates waste, issues a single tissue at a time. No maintenance involved. Simply insert refill packet as required.

Preferred by Thousands of Manufacturers

Tens of thousands of SIGHT SAVER Cleaning Stations are in use in every type of industrial plant, in drafting rooms, laboratories and offices. Installations range up to 200 units per plant. Most Safety Directors specify Sight Saver Cleaning Stations because the superiority of SIGHT SAVER tissues has been proved by world-wide distribution and habitual use by millions of people.

- promote safety
- increase productivity
- reduce waste and lost time
- improve morale



Available*

from leading Safety Supply Houses

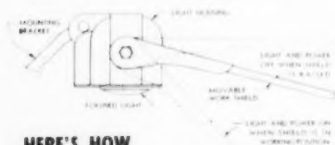
Cat. No. 60 Black Dispenser	-----	\$2.50
Cat. No. 61 White Dispenser	-----	\$2.50
Cat. No. 62 Safety Green Dispenser	-----	\$2.50
Cat. No. 65 Refill Packet of 800 tissues	---	\$1.45

*Write Dept. DZ-10 for list of Safety Supply Houses in your area.

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DOW CORNING CORPORATION
MIDLAND, MICHIGAN

The position of the Junkin Electro-Lock Shield is controlled by mercury switches. Interlocking power and light circuits will not permit the machine to operate unless the shatter-proof shield is in a completely protective position. Affords perfect visibility, and protects the operator from flying particles. Write for free bulletin No. 103.



**HERE'S HOW
THE ELECTRO-LOCK
SHIELD OPERATES**
—permits clear view
of work, still providing
maximum protection



JUNKIN
SAFETY APPLIANCE CO.
101 S. FLOYD ST.
LOUISVILLE 2, KENTUCKY

From page 158

TEST NO. 5: The driver was to pick up a load and park it at an angle convenient for loading it into a box car. Points were deducted from a maximum of 100 for the number of inches over or under the marker that was placed on the ground.

TEST NO. 7: This test was marked in conjunction with Test No. 4. One of the 10 judges position was in front of a load of lumber that the driver was to pick up. The driver lost 100 points if he picked up the load.

The safe practice insisted upon in our mills is that the driver must stop his vehicle and wait until there is no one in front of the load to be picked up.

TEST NO. 3: Is the usual type used in truck rodeos, known as diminishing clearance test. Piece of 1x2 fastened to blocks of wood were stood perpendicular and opposite each other, at 20-foot intervals. The first two posts were six inches farther apart than the total width of the machine and the last two posts were two inches wider than the total width of the machine. The contestant lost points from the maximum of 100 if any of these 1x2 posts were touched or knocked down.

TEST No. 9: Also similar to the straight line test used in truck rodeos. Markers were placed on the ground 11½ inches wider than the width of the tires on the carrier drivers blind side and the

TEST No. 10: This was an oral examination of the contestant on the Workmen's Compensation Board's regulations pertaining to the driving and handling of in-plant vehicles. Each contestant was timed with a stop watch and the average time for all contestants was taken as the normal. Contestants lost points if they were over or under the determined average.

No driver drove a vehicle that he had ever driven before. The three types of vehicles in general use, the Gerlinger, Hyster and Ross were available and the driver expected to choose the type of machine that he normally drove in the plant. All contestants were locked in a room previous to the start of the contest and they drew lots for order of competing.

A total of 17 contestants from Vancouver Island and the Mainland entered the competition, it being limited to one entry from each company participating. Plant elimination contests were held in many plants to choose the driver to represent the company. The contest was open to the public and several hundred spectators attended. The total contest was completed in about 4½ hours.

The winner was William Jordon, from the Alaska Pine Company, Ltd. plant in New Westminster, driving a Gerlinger machine. He received a large trophy and \$25 in cash. Coming in second place was Glen Robinson from the Vancouver Division of the British Columbia Forest Products Ltd., also driving a Gerlinger. He received \$15 in cash. Coming in third place was Peter Zayonc from the Canadian White Pine Division of MacMillan & Bloedel Ltd., driving a Ross Machine.⁴ His award was \$10.

Each contestant also received a crest suitable for wearing on a jacket or sweater.

Prizes were awarded to the winners by D. G. Allison, chairman, Safety Committee, British Columbia Lumber Manufacturers Association.

NEOPRENE SOLES

add durability and comfort to

Knapp "SAF-TEST" SAFETY SHOES



*Courtesy, Knapp Brothers
Shoe Manufacturing Corp.,
Brockton, Mass.*



Neat and comfortable



Tough and durable

Steel toe boxes and sturdy construction give Saf-Test shoes the critical approval of safety engineers. These handsome shoes take top honors in comfort, too, with their patented Aerotred innersole that cushions every step and provides resilient support to the arches. And, for the winning combination, *rugged neoprene soles* assure long-lasting service.

Neoprene soles bring added safety and endurance underfoot. Flexible and tough, these trim soles can take severe abrasion without cracking or chipping . . . withstand heat without softening or losing their sharp profile. And neoprene's resistance to oil, grease and chemicals pays off in exceptional durability on industry's toughest jobs.

When a sole offers such advantages, a fine shoe becomes even better. That's why so many top-quality safety shoes today feature the comfort and extra long wear of neoprene soles.

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DU PONT NEOPRENE

The rubber made by Du Pont since 1932



BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

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Rubber Chemicals Div. NE-10, Wilmington 98, Delaware

Please send me your booklet which contains information about neoprene soles . . . descriptions of neoprene's unusual properties and superior qualities

Name _____ Position _____

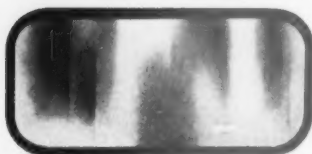
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WHY RISK A TRAFFIC ACCIDENT IN YOUR PLANT

Because of Blind Corners



Klear-Vu Safety Mirrors for Industrial Use

• Klear-Vu Safety Mirrors are designed for use in factories and warehouses where blind corners, cross aisle intersections, entrances and exits present a safety problem because of traffic accidents.

• Mounted at a height of 8 to 10 feet, Klear-Vu Safety Mirrors clearly reflect the movement of oncoming floor traffic from opposite direction—thereby removing principal cause for collisions.

• Mirrors are easily installed and adjustable for any desired angle. They are also adaptable for outdoor use.

Style	No. Dimensions
Circular Convex Glass	120 12" Dia.
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Lester L. Brossard Co.
540 N. Michigan Ave.
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A Rich Reward

By JULIUS A. DRAPER

THE SAFETY MAN'S JOB can be made to look very difficult. But few jobs can give such a rich reward in a spiritual sense when things go well. We believe the co-operation of our workers with safety personnel and with line supervision to be responsible for the safety record achieved by Consolidated's Wayagamack division.

From April 1, 1952 to May 6, 1953, the 1,235 employees at Wayagamack chalked up 3,197,301 man-hours without a lost time or disabling injury. For this achievement, the National Safety Council awarded the Award of Honor. Presentation of the award was made by Frank Pater, representing the Council, during a celebration held recently in the Coliseum at Three Rivers, Quebec.

The Honorable Maurice Duplessis, prime minister of Quebec, and George Hobart, president of Consolidated, gave short talks to more than 4,000 employees and their families who attended the festivities.

Our group of mills has reduced the accident frequency rate during the past few years. Our best year, by more than 30 per cent, was 1952. Since July 1, 1952 to the present, the Corporation rate is close to 2.0. Our frequency rate for the first five months of this year was 1.2.

To reduce the accident rate, we have two fundamental tasks:

1. Eliminate dangerous conditions.
2. Eliminate dangerous practices.

"Eliminate" is an ideal we can aspire to and strive for, but can never attain. In the past few years we have done a great deal of striving and aspiring.

In an effort to do away with dangerous conditions, we have improved the plants to such a degree that they resemble their former selves only in general outline. Our aim was efficiency.

We have been hammering away at responsibility of line super-

vision. This training, especially in the foremen group, has resulted in better attention at departmental level to the little physical faults, dangerous conditions, that can and should be corrected as a matter of course at foreman level.

Then we tackled the more difficult problem of dangerous practices. Here again we held line supervision responsible and a good part of our training has been directed toward our superintendent and foremen groups.

While accent has been placed on supervisory training, we have not neglected our workers. We try to have each of our men in for a safety meeting once every 16 months in groups of 20 to 40 men. The responsibility of the individual is stressed at these meetings to impress the worker with his part in the safety, security and well-being of himself and his family. We have achieved audience participation through a quiz session, with token prizes. We have fun at our meetings.

Perhaps our most important meetings are those at which no minutes are kept, no attendance taken and no so-called training aids used. I refer to the short, informal meetings held by foremen with their men. No foreman is required to hold such meetings, but we let it be understood that we consider it to be a mark of good leadership to do so. We tell each supervisor that before he is prepared to meet with the men on the safety subject, he must be convinced and feel it is the right and necessary thing to do.

We believe we have had some success in training our men, and I refer to all our men, managers included. We do not believe the job is completed. This job of safety education will never be finished. But we do believe we are on one of the right tracks. Training to have the job done correctly is safety training, whether safety is mentioned or not. Prevention of accidents is the result of safety-conscious workmanship.

JULIUS A. DRAPER is Director of Safety for Consolidated Paper Corp., Ltd., Montreal, Canada.



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STUDY OF ACTUAL FALLING SEQUENCE BY STROBOSCOPIC MULTI-FLASH EQUIPMENT AT 1/10,000 OF A SECOND

...use FLOORSAFE,
the new anti-slip floor dressing

See us at the
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Protect your place of business from crippling falls. Floorsafe gives your floors "Traction-Action."

Anti-slip synthetics with a high coefficient of friction are used in the manufacture of this new floor dressing discovery.

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Slide Kelly Slide has no place in your plant . . . it's Fine on the ball field, but members of your organization sliding on slippery floors are never safe . . . Sliding accidents keep safety costs high . . . mar perfect safety records.



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Keeps Floors Dry..
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Ways By Providing:**

- 1 Lower weight per cubic foot — absorbs more oil per lb. of weight.
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CONRAD HILTON HOTEL—OCT. 19-23**



**KILLS FLASH
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CANFIELD OIL COMPANY

General Offices: Cleveland 4, Ohio
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Western Ice Plant Cools Off Accidents

A 50 per cent reduction in annual plant insurance premiums. This has been accomplished by the Crystal Ice and Cold Storage Company, of Sacramento, Calif. The company gives full credit for the reduction to their organized safety program, instituted in 1949.

The concerted program was started after 1948 saw the insurance carrier for this company paying out, in claims, more than six times the total value of Crystal Company premiums that year. The loss ratio, per cent of company premiums paid out in claims by the insurance carrier, was a prohibitive 645 per cent. Organized safety reduced this figure to 31½ per cent, in 1952.

This company operates a 60-ton ice tank, a field car icing and pre-cooling department, and close to 750,000 cubic feet of cold storage space. The working force consists of 26 year-round employees, with an additional 25 to 30 casuals taken on each summer, to help over the business rush-period. One fly in the safety ointment was the fact that the majority of these summer employees were different individuals each year. Also, they worked in the field, away from the plant operation, so proper supervision and safety training was somewhat of a problem.

An analysis of the poor 1948 safety record showed definite weaknesses in employee relations. In an effort to overcome this, all employees were interviewed individually, and a general meeting was called. When the problem was submitted for discussion, it was found the employees were willing to cooperate in a safety program if management would take the lead and lend full support. These interviews are now given annually, and each employee has an opportunity to make suggestions or criticisms, and also to present his individual problems to management.

A social club was organized, with all male employees, including management, invited to join. Frequent activities are scheduled, year-round, and attendance has averaged 85 per cent at the monthly meetings. A general safety committee, composed of super-

visors and members of management, functions under club auspices. Plant workers make up an investigating safety committee.

A different safety theme is used each month, and appropriate movies and talks are scheduled at the monthly meetings. At the Christmas meeting, A. R. Carstensen, company president, informs members of the status of the company, current problems, and plans for the coming year.

Many physical changes have been made in the plant, and equipment is painted in accordance with the national safety code. Each year, a safety contest among the three plant departments is sponsored by the club. Prizes run the gamut from cash awards to household appliances, and the company foots the bill for these prizes.

A mimeographed house organ is published monthly, and this is mailed to the workers' homes a few days before each monthly meeting, to acquaint the entire family with the safety program. The paper includes current news of the industry, personal notes, safety and club news and an editorial.

When a new accident takes place where a man might have been injured, but where no injury occurs, an accident prevention form is filled out by the supervisor and an investigation follows. The company reports this procedure helps bring to light hazards and dangerous practices which can be corrected before an injury occurs. Safety posters stressing the current monthly safety theme are displayed throughout the plant, and also at work sites out in the field. Appropriate posters are displayed.

Individual safety award pins, made available by the National Safety Council, are presented at the monthly club meeting immediately following completion of the required no lost time injury period. The insurance company provides cards stating the number of days worked since the last lost time accident.

The Crystal Company attributes the safety record improvement to the organized program begun in 1949. In four years, this 26-employee plant reduced its annual insurance premium from \$4,000 to \$2,000.

Aluminized

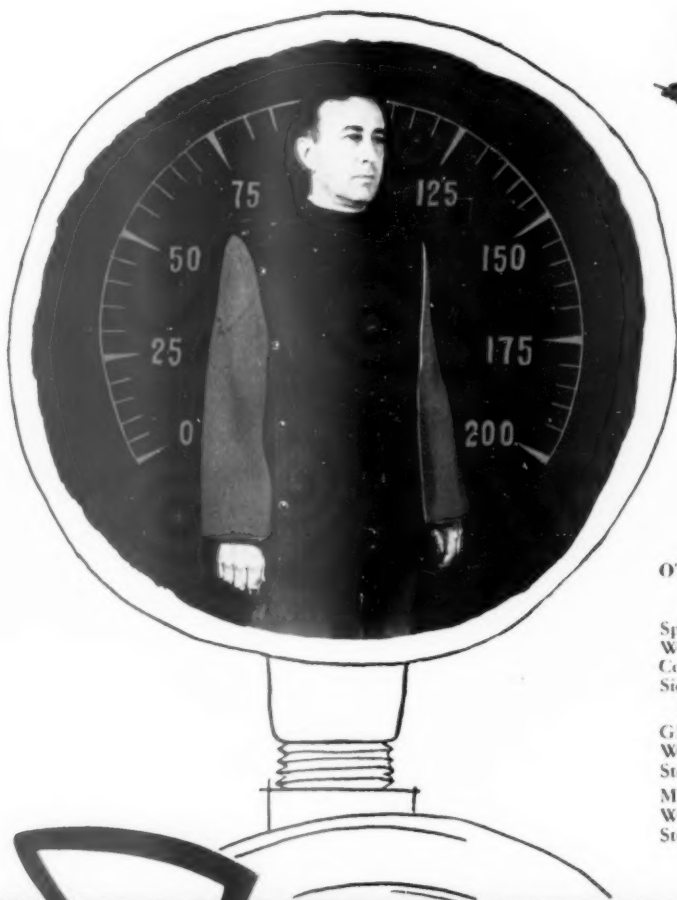
**WOOL PATCHES ON COATS BY KIMBALL
GIVE ADDED PROTECTION**



Kimball's new woolen Coats with side button opening for greater safety — Aluminized wool patches which reflect away intense heat and insure longer fabric life with greater wearing comfort, are the latest additions to the Kimball Safety Clothing Line.

The Aluminized patches can be placed anywhere to suit the purchaser. These coats come in all sizes.

Olive Drab: 18 oz. serge,
20 oz. Melton, 32 oz. Melton.
Navy Blue: 20 oz. Melton.



OTHER KIMBALL SAFETY PRODUCTS

Eye Protection:
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Body Protection:
CLOTHING:
Wool, Flameproofed
Cotton.

LEGGINS & SPATS:
Leather, Asbestos,
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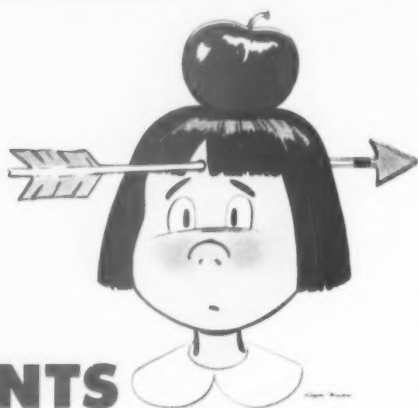
APRONS:
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Kimball

**SAFETY PRODUCTS
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For a Successful Poster Program



ACCIDENTS
don't just happen
they ARE CAUSED!

JUMBO POSTER for NOVEMBER 1953

The Jumbo poster, issued monthly, is designed for outdoor use and is available to members on annual subscription but is not stocked. Its actual size is 9' 11" by 11' 8".

THE 1953 Poster Directory contains miniatures of 756 posters — top-notch selections on a great variety of subjects. Extra copies available at 50 cents each—write Membership Dept., N.S.C.

Posters miniaturized in these pages are new — shown here for the first time.

Those posters illustrated in one color on the following two pages are actually printed in two or more colors.



9902-A

8' 2" x 11' 2"



9870-A

8' 2" x 11' 2"



0047-C

25x38

The two new four-color posters above are illustrative of the 72 four-color posters shown in the 1953 Poster Directory.

Above new "C" poster, issued monthly, is indicative of the other two color posters—shown in one color on the following pages and in the 1953 Poster Directory.

Electrotypes of poster miniatures on this page are not available, nor can payroll inserts be supplied.

Posters below are printed in two or more colors
(Available only in sizes indicated)



NATIONAL SAFETY COUNCIL
0012-B 17x23



NATIONAL SAFETY COUNCIL
9899-A 8½x11½



NATIONAL SAFETY COUNCIL
0003-A 8½x11½



NATIONAL SAFETY COUNCIL
0025-A 8½x11½



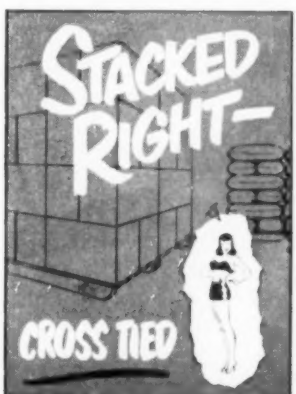
NATIONAL SAFETY COUNCIL
0009-A 8½x11½



NATIONAL SAFETY COUNCIL
0023-B 17x23



NATIONAL SAFETY COUNCIL
0016-B 17x23



NATIONAL SAFETY COUNCIL
9928-B 17x23



NATIONAL SAFETY COUNCIL
0008-A 8½x11½

Electrotypes of payroll inserts can be furnished in all poster illustrations shown above.

Posters below are printed in two or more colors
(Available only in sizes indicated)



NATIONAL SAFETY COUNCIL
9980-A 8½x11½



NATIONAL SAFETY COUNCIL
0019-A 8½x11½



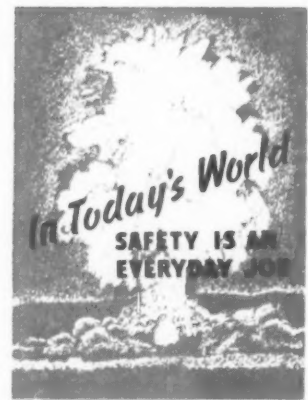
NATIONAL SAFETY COUNCIL
9968-B 17x23



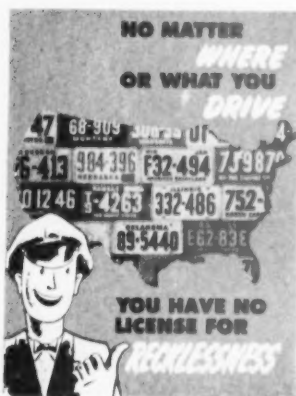
NATIONAL SAFETY COUNCIL
9979-A 8½x11½



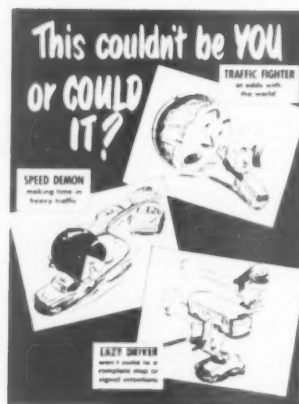
NATIONAL SAFETY COUNCIL
T-9978-B 17x23



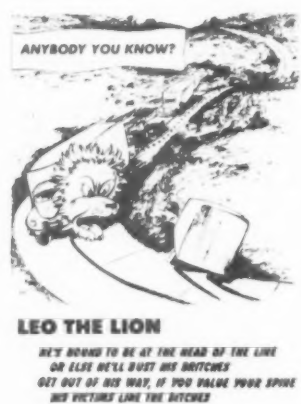
NATIONAL SAFETY COUNCIL
0014-A 8½x11½



NATIONAL SAFETY COUNCIL
V-0028-B 17x23



NATIONAL SAFETY COUNCIL
V-0027-A 8½x11½



NATIONAL SAFETY COUNCIL
V-9966-A 8½x11½

Electrotypes of payroll inserts can be furnished in all poster illustrations shown above.

Why Skin-toughening PREVENTS ATHLETE'S FOOT

SHOES CAUSE ATHLETE'S FOOT



The modern shoe is the main cause of athlete's foot, says the U. S. Public Health Service (Bulletin R-674). Shoes soften and devitalize the skin. This soft, dead skin inside a warm dark shoe is ideal soil for the growth of athlete's foot fungus.

FUNGUS SPORES ARE EVERYWHERE

The fungus spores, or seeds, are as common as dust. Some of them are on the skin almost all the time. And when the skin's resistance is low, they grow and multiply. The result is athlete's foot.

The chief danger of athlete's foot is that it causes cracks in the skin. More dangerous germs can then enter the blood stream. Serious secondary infections may result.

DISINFECTING THE FEET WON'T HELP



Attempts to disinfect bathers' feet are "futile, illogical, and potentially harmful," according to skin specialists.* You can't kill all the fungus spores, and you may weaken the skin still more by trying to kill them.

WHAT IS THE ANSWER?

Skin specialists say that the best chance of preventing athlete's foot is to build up the skin's resistance to fungus attack.* A strong healthy skin is your best defense against the ever-present fungus spores.

That is the basic principle of Onox skin-toughening.

*Archives of Dermatology & Syphilology, April, 1942.

WHAT IS ŌNOX?

ŌNOX is an odorless, non-poisonous solution of five beneficial mineral salts. Both laboratory† and controlled tests show that Onox toughens the skin and makes it resistant to fungus attack.

†Pease Laboratories, Inc., New York, N. Y.

IT'S EASY TO USE

Onox is used in a soft sponge rubber mat. One mat serves 50 bathers on a shift. Stepping on the sponge (after showering) forces Onox up between the toes, where it is needed. A good percentage of the salts stay on the skin, even after drying with a towel.

MEN LIKE TO USE THE MATS

The sponge mat is pleasant to step on. It is neat and attractive—no splash, no mess. And Onox is very refreshing to tired, aching feet.

FREE BULLETINS AND LEAFLETS

Free bulletins are sent you each month. These, along with easy-to-read leaflets, explain the need for skin-toughening. Customers report excellent results with this free service material.



Ōnox skin-toughening is used by over 70% of the largest manufacturers in the U. S. A.

ODORLESS
EASY TO
MAINTAIN
NOTHING
TO GET OUT
OF ORDER



**COST IS SMALL—
1¢ PER MAN PER WEEK**

TRIAL OFFER... We will ship any amount of Onox and footmats for 60 days' use. If you and your men are not more than satisfied with results, you owe us nothing. For further information, write, or send coupon.

Ōnox, Inc., 119 Second St., San Francisco 5, Calif.
(Warehouses: Brooklyn, Cleveland, New Orleans, Los Angeles)

Send free catalog—no obligation—about Onox.

☐ We have showers. ☐ We plan to have showers.

Name.....Title.....

Company.....

Address.....

City.....Zone...State.....

EYE WASHING FOUNTAIN



SAVE EYES!



Leading industrial doctors advise immediate washing with plenty of running water as the best first aid treatment for any chemical in the eyes. Records prove that washing with water for ten minutes or more, close to the accident, is necessary to reduce or eliminate eye damage.

Forehead operation leaves hands free to open eyelids so water can be directed wherever chemicals might be lodged. Sanitary white baked enamel bowl is resistant to most fumes.

Over 500 industrial plant installations have been made to date.

Write For Details.

VALVE
Chain Operated
Quick Action
Self-Closing

NEW EMERGENCY SHOWER



Instant on accident occurs, to prevent a disfiguring burn—even a fatality.

Special shower head, no holes to clog—can be used where unfiltered water prevails.

Write For Details

GLASS SLIVERS
AND CHEMICAL
IN EYES!

DISFIGURING
FACIAL CUTS
AND BURNS

CUTS AND
CHEMICAL BURNS
ON ARMS
AND BODY

THIS HAPPENS
WHEN
UNPROTECTED
GLASS BOTTLES
ARE BUMPED

NEW LOW COST B & A SAF-T-BAGS



5 PINT
1 GALLON
5 GALLON

are widely used for the safe handling of glass bottles containing harmful chemicals, also the storage and recovery of expensive serums, biologicals, and other costly products.

Painful cuts, disfiguring burns, loss of eyesight, or even a fatality, do result from corrosive liquid splash and flying glass when unprotected bottles shatter.

Write For Details.

BENSON & ASSOCIATES, INC.

P. O. Box 7542, Dept. N.S., Chicago 80, Ill.

Quotable Quotes

. . . From DR. J. L. ROSENSTEIN

It is easy to evade lack of assurance by wishing things we do to be right and then believing them to be right.

* * *

Delusions are beliefs in things which have no basis in fact. Delusions of being ill, of being great or strong, of being cheated of ideas or inventions, of not receiving due credit for achievements are those most common in industry.

* * *

All persons who are now insane (without organic causes) were at one time sane. All normal persons use psychological defenses. It is when psychological defenses are used too long, too often, and too well as an escape from real life and its difficulties that they are harmful and may lead to a condition called insanity.

* * *

Personality is the way a person does things. It is the sum total of the reaction patterns or reaction organizations at the disposal of a person. This includes all his manners, mannerisms, idiosyncrasies, etc.

* * *

Personality is too often judged through an analysis of someone's behavior, to which is added the examiner's prejudices of what are good and bad, desirable and undesirable, likable and distasteful.

* * *

If industry finds it worth while to take inventory in order to discover what lines to enlarge upon or eliminate, then it should be worth while to take personal inventory for the purpose of eliminating undesirable tendencies and enlarging upon desirable behavior lines.

* * *

If one subordinate in an organization cannot face you with a difficulty, then there is something wrong in the relationship existing between management and employees.

The executive who cannot admit his mistakes to himself or to his subordinates without loss of dignity is in need of personal inventory.

* * *

Respect, admiration, and loyalty are not given to the pompous, self-important person. Ridicule, caricature, and mimicry are usually accorded him. We respect, admire, and are loyal to the man higher up who is a "regular fellow."

* * *

Aside from providing economic security, work provides an outlet for mental, emotional, and physical energy.

DR. J. L. ROSENSTEIN is Industrial Psychologist, University of Miami, Coral Gables, Fla., and formerly Professor in the Department of Management at Loyola University, Chicago. These excerpts are from his *One Day Course in Human Relations for Supervisors*.



PUT

ARO-BROM^{G.S.®}

ON YOUR
PLANT
PROTECTION
STAFF



This powerful germ killer offers every desirable feature for a safe, effective, all-purpose germicide. Aro-Brom, G.S. now offers positive, uniform protection against both E. Typhi and Staph. Aureus, the two main families of organisms causing costly infections. It has a wide range of non-specific kill. *Non-toxic and non-corrosive*, it has an agreeable odor. An excellent deodorant, it cleans as it kills.

SUGGESTED USES

1. As a disinfectant wash for TOILET BOWLS, URINALS, LAVATORIES, SHOWER AND LOCKER ROOM FLOORS, LOCKERS, WALLS, TOILET SEATS, etc.
2. In recommended solution it is an excellent control for ATHLETE'S FOOT.
3. To eliminate danger of infection in community apparel such as MASKS, GOGGLES, HELMETS, RUBBER BOOTS, GLOVES, etc.
4. It is the ideal general disinfectant for PLANT DISPENSARIES.

The scheduled use of Aro-Brom is an inexpensive sanitation program that rapidly pays off in increased personnel efficiency. Triple-action Aro-Brom actually reduces maintenance costs for it replaces individual cleaners, germicides and deodorants. A bacteriological certificate is sent to you on every shipment. This is your guarantee of positive germicidal control in solution. Ask your G-S representative or write us today for complete details on Aro-Brom, G.S., the only all-purpose germicide offering uniform effectiveness.

A-8111



the Gerson-Stewart Corp.

Sanitation Specialists Since 1914 • CLEVELAND 4, OHIO

Vul-Cork
means safety . . .
and
always has.
But more
than that,
Vul-Cork was
the first
"floating"
cork and
rubber sole
on the market,
an energy-
saving factor
that is
important
to workers
and
management
alike.

specify
VUL-CORK
and
VUL-CORK
NEOPRENE
SAFETY SOLES

Anti-Slip - won't pick up chips
. . . light, resilient, flexible.
Vul-Cork Neoprene resists oil,
grease, acids, hot metals.
Write for samples.

CAMBRIDGE RUBBER CO.
Vul-Cork Div., Taneytown, Md.
. . . makers of **Vul-Cork**

Safer, Economic Hauling



THE PROBLEM of daily transporting incoming material across the busy Lincoln Highway (US 30) from one part of The Autocar Company in Ardmore, Pa., to the other has been virtually eliminated by the erection of a new unloading dock. Autocar engineers solved the traffic problem, erased a hazard, speeded up production, and reduced materials handling costs.

The new unloading dock extends back 60 feet from the East side of Greenwood avenue south of the Lincoln Highway and can accommodate two over-the-road tractor trailer vehicles at the same time. A concrete floor slopes back from pavement level so the floor of the trailer winds up just about flush with a 26-inch high platform.

There are two loading and unloading dockboards, one on each side of the dock. Each is an eight-foot wide platform with a floor of $\frac{1}{4}$ -inch steel and a six-inch movable leaf of the same material on the front end. To permit fork lift trucks to ride smoothly onto vehicles of any height, for removal of cargo the whole dockboard can be raised or lowered by a hand lever with the ease of operating an automobile hand brake.

Though these dockboards, with their steel plate, weigh 1200 pounds, they are easily moved by a pulley and counter-balance arrangement using an 842 pound weight. Both of the dockboards can comfortably accommodate loads up to 3000 pounds.

The whole dock, surrounded with a three-foot cable fence for safety, can park the longest tractor trailer units without having any part of the vehicle extending over the sidewalk at its entrance.

Autocar, when ordering supplies for the assembly line, tire shop, cab assembly units and other departments on the south side of the highway, specifies delivery on the Greenwood avenue dock.

New York Convention

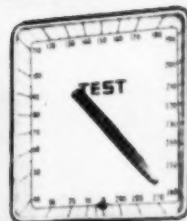
NEW YORK'S 1954 safety convention and exposition will run five days instead of the usual four. The convention, the twenty-fourth annual, will be held April 5 through 9 at the Hotel Statler.

The Greater New York Safety Council, sponsor of the event, announced the election of George E. Decker, senior engineer of the Aetna Casualty and Surety Company, as general chairman for the 1954 convention and exposition.

**HERE'S A
CANVAS GLOVE
WITH A
Safer, Surer
GRIP!**



GRIPMETER



**AND GUARANTEED
TO SAVE YOU MONEY!**

In a series of gripmeter tests of "Plastic-Dot" versus regular canvas gloves, Sailor White, the famous strong man, more than doubled his gripping power when he wore "Plastic-Dots."

Riegel "Plastic-Dot" work gloves are guaranteed to outwear two or more pairs of heavy canvas gloves. They will save you money on any operation where you are now using any weight or make of regular canvas gloves. At the same time, they provide a safer, surer grip... with full working comfort.

See for yourself how this amazing glove wears and wears! Send for a free pair for testing, together with full information and complete list of local distributors.



**FREE
SAMPLE
SWATCH!**

Riegel
"PLASTIC-DOT" WORK GLOVE
Trade-Mark

**GUARANTEED TO OUTWEAR TWO OR MORE
PAIRS OF HEAVY CANVAS GLOVES**

**Now in a wide range of styles... stocked by over
1,000 distributors from coast to coast.**

RIEDEL TEXTILE CORP. • 260 Madison Avenue • New York 16, N.Y. • Atlanta
Boston • Chicago • Cleveland • Dallas • Jackson (Miss.) • Los Angeles • Pittsburgh

RIEDEL TEXTILE CORP., 260 Madison Ave., N. Y. 16

Send me free sample of Riegel "Plastic-Dot" work glove fabric and list of distributors.

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Co.

Address

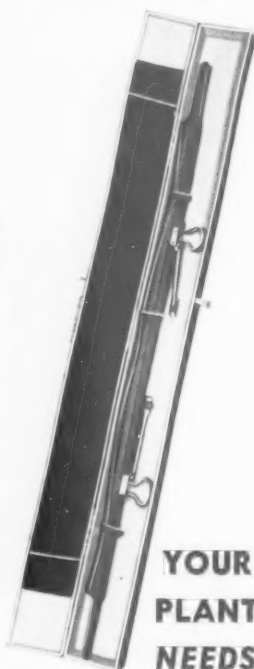
City State

JUNKIN STRETCHERS



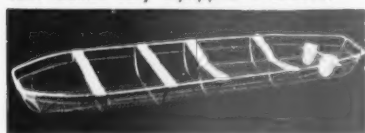
STRETCHER CASE

\$23⁸⁰ FOR
Louisville



**YOUR
PLANT
NEEDS
STRETCHERS**

The Junkin Stretcher Case affords a convenient and compact cabinet for storing the army type stretcher, blankets and first aid equipment. It provides a definite location for the equipment and protects it against the deteriorating effects of dirt and grime. And because it's compact it's a SPACE SAVER too! Comes fully equipped if desired.



JUNKIN SPLINT-TYPE STRETCHER

Construction permits patient to be carried horizontally or lifted vertically without danger from inaccessible locations. Canvas straps and footrests keep patient rigid and comfortable. For complete information write for free descriptive literature.

JUNKIN

SAFETY APPLIANCE CO.
101 S. FLOYD ST.
LOUISVILLE 2, KENTUCKY



Award Recognition

—From page 115

very impressive. All personnel now striving for Award of Honor. First employee to injure himself will probably be tarred and feathered by fellow workers."

II. Plan provides equitable basis for evaluating experience

As one example of how the Award Plan distributes the awards on a fair and equitable basis, consider four plants of the Squiggler Corporation and compare their recognition under the Award Plan with their recognition under the rules set up by most of the Sections for conducting their various contests.

The A Plant receives a Reduction Award in the Sectional Contest because its 1952 frequency rate was 90 per cent lower than its rate in a prior period and was only one-third as high as the average for its group. It similarly reduced its severity rate, although the Contest Rules did not consider this. It received only a Reduction Award because its frequency rate was not one of the three lowest in the industry. Under the Industrial Award Plan, such an excellent performance would have qualified it for the Award of Honor or for the Award of Merit, depending upon the amount of exposure involved.

The Bay Plant also receives a Reduction Award in the Contest. Its 1952 frequency rate of 10.16 was slightly lower than the group rate of 10.20, and it was also lower than the Bay Plant's own prior rate of 10.17. This was not much of an improvement, or much of a record, but it gets as good an award as the A Plant got. Naturally, knowing this, the A Plant people feel that their Reduction Award was inadequate. Actually, you could say that the Bay Plant had no real improvement at all.

By the definition of "average," approximately half of the plants have rates which are better than average. And by chance fluctuation, a rate can "improve" from 10.17 to 10.16, or even considerably more. The Bay Plant has

done nothing to deserve special recognition, and it would receive none under the Award Plan.

The Cay Plant of Squiggler Corporation had the fourth lowest frequency rate in its Contest Division, which put it out of the running for a major Contest award, and it had the lowest severity rate of all the plants. It did not even qualify for a Reduction Award, because, although its rates were less than one-tenth as high as the industry average, its 1952 frequency rate of .12 was higher than its previous rate of .11.

A plant with a near perfect record year after year may well deserve some recognition merely for continuing such an outstanding record. Each year the record continues is another year of hard work and achievement—not a year of total inactivity. The Cay Plant would have a good chance of qualifying for a top award under the Industrial Award Plan, because the Plan would consider not only the fact that the plant's rates were better than average but also the tremendous extent to which they were better.

The Day Plant won a first place award by having the lowest frequency rate in its Contest Division. This low frequency rate suggested a very good record. There were only 8 disability cases all year in the tremendous Day Plant. But two of them were fatals, and the plant had the highest severity rate in its history—more than ten times the rate of the preceding year. The Industrial Award Plan would not allow any award for the Day Plant, but the Contest Rules, by looking at only part of the picture, gave the plant a top-drawer award.

By using a more comprehensive evaluation method, the Award Plan makes itself *easier* to live with, because it avoids the gross inequities that can occur when evaluation considers only part of the record and considers any change in the record to be a significant one. The Contest Rules, for example, consider a downward reduction of .01 to be significant improvement in the record, and they consider a similar upward fluctuation to be a significant

strong • sturdy • light weight
above all Dayton Ladders are



safer

Dayton Safety Ladders make all off-the-ground jobs SAFER . . . give workman complete confidence . . . he can work with both hands from the roomy, rail-guarded platform. Automatic locking feature assures safety while ladder is in use. Easy to carry. Folds compactly.

Dayton Safety Ladders are constructed of tested airplane spruce, reinforced with rigid steel supports for great strength and lightness of weight. Sizes: 3 ft. to 16 ft. (ground-to-platform height) with standard rubber safety shoes at no extra cost.

Dayton Safety Leather Shoes

. . . make your present straight ladders SAFER ladders . . . help prevent slipping. Specially designed suction rubber tread has intense gripping power. Shoes instantly converted for either indoor or outdoor use.

Base: 16-gauge steel. Side plates: 13-gauge steel. Treads are renewable. Lock nuts and spring washers assure proper adjustment.

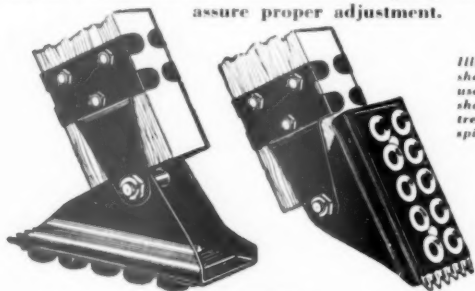


Illustration shows double use of ladder shoe. Rubber tread or spiked toe.

Dayton "Roll-Along" Ladders

1. Rubber tired swivel casters provide easy, effortless movement into any direction.
2. Safety shoes with renewable treads hold ladder safely stationary while ladder is in use.
3. Constructed of tested airplane spruce throughout, reinforced with steel braces for added safety.
4. Platform folds into extra step when extra height is required.
5. Folds compactly for convenient storage.
6. Three sizes: 3 ft.—4½ ft.—6 ft.



Write Dept. D
 for Bulletin

Dayton

safety ladders

Dayton
safety ladder co.

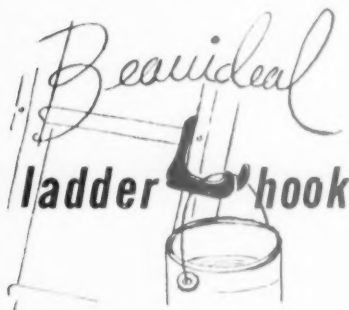
2339 Gilbert Ave., Cincinnati, Ohio

In Canada—
 SAFETY SUPPLY CO., TORONTO

Every ladder in your plant should have these SAFETY devices



Fits any standard rung ladder. Provides a safe, comfortable, level platform. Frame is of cast aluminum with hardwood step and safety walk to prevent slipping. Weighs only seven pounds. Thousands in use—in largest industrial plants. \$10.75 postpaid. Quantity prices on request.



A handy, double, non-tipping hook to hold pails securely on outside of ladder. Made of solid cast aluminum. \$1.35 postpaid. Quantity prices on request.

PROMOTE LADDER SAFETY BY PROVIDING THE RIGHT SAFETY EQUIPMENT!

Beavideal INC.
867 S. WATER SAGINAW, MICHIGAN

worsening of the safety job being done at the plant.

III. How many awards last year?

Under the Industrial Award Plan, it is hard to say just exactly when the "Award Year" ends. The experience evaluated is that of the preceding calendar year (1952 in this case). But the annual "Summary of Industrial Injuries" reports for 1952 are received all during the first quarter of 1953. The evaluation process begins as soon as the first reports are received and continues (simultaneously with the annual study of industrial injury rates) through the second quarter. August or September appears to be the most logical time to stop and see how many awards have been earned since the same time in the preceding year.

As of now, all par-comparison evaluations of 1952 experience have been performed. The resulting awards were 1952 awards.

Perfect-record Awards of Merit and Awards of Honor can be qualified for at any time. If the qualifying, or termination, date of the record occurred in 1952, the award was a 1952 award. If that date occurred after the first of this year, it was a 1953 award.

Thus, the following study includes all awards for significant improvement in 1952, all 1952 perfect-record awards made since last year's study, and all 1953 perfect-record awards made up to the time of the study reported in this article.

The accompanying table shows the number of awards of each type (except President's Letters) which were earned by plants in each major industry group. Also shown for each industry is the approximate number of eligible units whose experience was evaluated. The basis of each of these estimates is the actual number of eligible units reported for the 1952 statistical study, all of which were evaluated. Additional evaluations

RESULTS OF 1952-53 AWARD YEAR

Industry Group	Number of Units Evaluated	Number of Awards				Total
		Honor	Merit	Commendation		
All Industries	8,843	316	600	348		1,264*
Aircraft Manufacturing	42	5	8	1		14
Air Transport	64	2	5			7
Automobile	350	17	23	13		53
Cement	156	4	22	26		52
Chemical	660	41	91	70		202
Clay Products	132	7	11	6		24
Communications	38	1		2		3
Construction	905	12	19	5		36
Electrical Equipment	275	17	44	21		82
Electric Utilities	353	6	11	2		21
Food	600	15	36	42		93
Foundry	139	7	8	1		16
Gas Utilities	424	6	11	2		19
Glass	63	4	9	5		18
Iron & Steel Products	342	20	23	17		60
Leather	55	2	8	3		13
Lumber	120	7	2	1		10
Machinery	340	20	37	7		64
Marine Transport	18			1		1
Meat Packing	80	3	10	1		14
Mining, Underground Coal	23	1	4	1		6
Mining, Underground, except Coal	65	6	1	3		10
Mining, Surface	35		1	12		13
Misc. Manufacturing	39	2	3	2		7
Non-Ferrous Metals & Products	115	11	13	4		30
Petroleum	930	25	28	12		65
Printing & Publishing	53		3	2		5
Pulp & Paper	665	18	33	15		66
Quarry	75	4	1	4		9
Railroad Equipment	28	1	2	1		4
Railroads	180	1	15	2		19
Rubber	130	8	21	4		33
Sheet Metal Products	161	4	12	10		26
Shipbuilding	38	6	3			9
Steel	136	12	26	1		39
Textile	225	7	24	8		39
Tobacco	38	1	4	1		6
Transit	296		10	5		15
Wholesale & Retail Trade	29	1	1	2		4
Wood Products	100	6	1	2		11
Miscellaneous	549	4	6	31		41

*In addition there were 410 President's Letters.

LOOK... GENCO "FIT-ALL" WINTER LINERS

For Hard Hat Users Are Back Again
Custom Made for All Styles



TWO PIECE STYLE FOR LACE-IN TYPE HEAD BAND

Made entirely of warm, wool fabric. Has detachable ear flaps which can be removed in mild weather. Fits low on back of neck and has tie strings to hold ear flaps down. Will fit any size head.

GENCO "FIT-ALL"
GENUINE CHROME LEATHER CHIN STRAPS
Adjustable for All Makes of Hard Hats



ONE PIECE STYLE FOR SIX POINT HEAD BAND

This Liner has six eyelets spaced correctly so Liner will fit right. Is also made of wool in an attractive herringbone pattern. Can be washed or dry cleaned and will not shrink or stretch out of shape.

NOTICE: These Liners are now in stock and can be shipped immediately as winter is just around the corner.

Call, wire or write for prices.

Also Manufacturers of Clothing, Gloves and Mittens
Made of Leather, Asbestos or Canvas.

Write for our Free Catalogue.



C. D. GENTER CO.

2109 BROAD STREET
CHATTANOOGA, TENN.

ALLSAFE DYNEL

The Amazing NEW

INDUSTRIAL WORK CLOTHING

"It's the only
worksuit I'm
not ashamed
to wear on
the street."

Available in
shirt and trousers
as pictured or in coveralls...
Allsafe Esquire
Gray or Natural
Color as desired



RESISTANT TO
ACIDS
CAUSTICS
GREASE
OIL and DIRT

Long after other clothing has been thrown away as rags, **ALLSAFE DYNEL** is not only good as new but looks like new—neat, dressy, comfortable.

**Outlasts Cotton or Wool
Clothing 10 Times Over!**

On-the-job tests prove it's cheapest in the long run when exposure to most acids, corrosive alkalies, fumes, moisture, or grease wrecks ordinary clothes overnight.

FREE TRIAL . . . An **ALLSAFE DYNEL** garment to inspect in plant. Write for details today. No charge if returned in saleable condition.



American Allsafe Co., Inc.
1245 Niagara St. • Buffalo 13, N. Y.

were performed because of:

1. Special applications for company-wide evaluation of the experience of multi-plant companies and
2. Applications for awards based on perfect records of 1,000,000 man hours or more.

In all industries, there were 8,843 eligible units whose experience was reported and evaluated. 1,674 (or 18.9 per cent) of these qualified for some award under the plan. (The plan provides for four levels of awards.)

President's Letter Awards went to 410, or 4.6 per cent of the 8,843 units whose experience was evaluated. Another 3.9 per cent (348 units) received Certificates of Commendation. 6.8 per cent (600 units) received Awards of Merit. 309 Awards of Merit were on the perfect-record basis and 291 were on the par-comparison basis. 3.6 per cent (316 units) received Awards of Honor. 32 Awards of Honor were on the perfect-record basis and 234 were on the par-comparison basis.

This recapitulation of the second year of the operation of the Industrial Award Plan is not intended to take the place of a list of the actual names of the award winners. The names have already been published. Each month, **NATIONAL SAFETY NEWS** carries a feature entitled *For Distinguished Service*. In it are listed the names of all winners of Honor, Merit, and Commendation Awards, without regard to their industry or location, whose eligibility has been determined (1) before the deadline date for that issue of the magazine and (2) since the deadline date of the previous issue.

In certain industries, notably Mining and Quarry, the Council receives some of the injury experience from other agencies in the form of combined totals rather than for each individual unit. In these industries, most of the individual unit reports were received from companies already included in the combined totals, and they were submitted to the Council for award evaluation only. They were reports for units which were believed to have a good chance of qualifying. For this reason, the percentage of qualifiers to individual unit reports was high in these industries.

Traffic Safety Is Theme Of Disney Film

Growing concern over the tragic annual traffic death toll reaped on our highways and in our cities prompted Walt Disney to produce *Motor Mania*. In a seven-minute Technicolor picture Walt Disney has undertaken to cast the powerful spotlight of penetrating humor on the two basic causes of our national traffic safety problem; the average motorist and the average pedestrian.

The film has received many awards from national educational groups concerned with this problem. The National Safety Council Award, the David S. Beyer Trophy and *U.S. Camera's* special certificate are some of the recognitions accorded *Motor Mania*.

In an effort to reach the maximum possible audience with this safety cartoon, Disney recently announced the film will be available in 16mm for use by schools, industrial organizations, civic groups; and other 16mm film users.

The film is prescribed viewing for all participants in the Traffic Violator's School, conducted by the Oakland, Calif., Police Department. Two prints of the film are kept in use by the Public Information Sections of the Los Angeles Police Department, as well as the California Highway Patrol. Industrial firms are reported to be integrating it into their safety programs. Some schools are now beginning to use the picture as part of their driver education courses.

To meet this response and acceptance, the Disney studio placed a large order for 16mm prints and has arranged for 80 rental libraries across the country to distribute these prints to film users who may rent the picture for a small fee.

The story line of *Motor Mania* is simple but effective. Working from statistics provided by police departments and other safety groups, Disney uses caricature to display an appalling change. This change is the Jekyll-and-Hyde transformation which takes place when the average individual finds himself behind the wheel of one of today's deadlier weapons; the modern automobile.

PERSONALS



DR. JEAN SPENCER FELTON has been appointed director of health service of the University of Oklahoma Hospitals in Oklahoma City.

A specialist in industrial medicine, Dr. Felton also has academic appointments in the University of Oklahoma School of Medicine as associate professor in the departments of medicine and preventive medicine and public health. He will establish the medical school's first course in industrial medicine this fall.

Dr. Felton has been appointed to the Oklahoma governor's committee to further the employment of the handicapped. He also has been named as a member of the correspondence committee on occupational safety and health of the International Labor Office.

Dr. Felton received his A.B. and M.D. degrees from Stanford. He interned and served residencies at San Francisco hospitals. During World War II he was in charge of industrial medicine for the San Francisco port of embarkation. Dr. Felton came to Oklahoma City from the Oak Ridge National Laboratory, Oak Ridge, Tenn., after serving there as medical director.

E. W. BULLARD, president of the E. D. Bullard Company, manufacturers of industrial safety equipment, San Francisco, has been appointed to the Research Committee of President Eisenhower's Committee on Occupational Safety.

Mr. Bullard is the deputy chief of Civil Defense in San Francisco, and a member of the Governor's Safety Council. During the war, he was chairman of the Rescue Division in San Francisco County;

a consultant to the Federal Civilian Defense Commission, and a member of the Manpower Committee, and has served on the Advisory Board of the U. S. Bureau of Mines.

Mr. Bullard organized the San Francisco Chapter of the American Society of Safety Engineers and was a founder of the Veterans of Safety.

THOMAS F. SMITH of Corona, N. Y., has been appointed a senior safety engineer in the Lynbrook office of Liberty Mutual Insurance Company.

Mr. Smith came to work for Liberty Mutual in 1948 as a safety engineer in the loss prevention department of the company's Brooklyn office until his recent promotion. He is a graduate of Muhlenberg College, Allentown, Pa., and has been an associate member of the American Safety Engineers since 1951.

WILLIAM J. FIKE has been appointed safety director for the Basic Refractories, Inc., Maple Grove, Ohio, plant. He will be responsible for the development of an integrated safety program for the company's quarrying, crushing and burning plant facilities.

Mr. Fike graduated from Kent State University in 1948, and since has done master's work in education. After graduating he was associated with Station WAKE in Cuyahoga Falls as reporter. In 1950 he joined the Ravenna Arsenal as safety supervisor.

RALPH J. VERNON transferred from the Dallas office of Liberty Mutual Insurance Company to the Tulsa office. He will serve as a

AVAILABLE

Resident of New Jersey area desires sales representative franchise or exclusive territory with manufacturer or distributor of industrial safety equipment. Excellent contacts, top level references, fine professional safety and educational background coupled with sales ability. Address Box 436. NATIONAL SAFETY NEWS.

safety engineer in the Tulsa loss prevention department.

Mr. Vernon is a graduate of Clemson College, Clemson, S. C. and A. & M. College of Texas, College Station, Texas. He is a member of the Kiwanis International and the American Society of Safety Engineers.

DARWIN WHIPKEY, Penn Township, has been appointed safety director for New York State Natural Gas Corp.

Mr. Whipkey, a 12-year company veteran, served in various capacities at The Peoples Natural Gas Company's Brave Station, and at Therm City Station, near Syracuse, N.Y., prior to his transfer to the Safety Department in 1952.

Obituary

DR. ROYAL MEEKER

DR. ROYAL MEEKER, internationally known economist and former head of the United States Bureau of Labor Statistics, died August 16 at New Haven, Conn. He was 80 years old.

At one time Dr. Meeker was secretary of the International Association of Industrial Accident Boards and Commissions and Secretary of Labor and Industry for the Commonwealth of Pennsylvania. He was a director of the National Safety Council, 1916-20.

ISAIAH GORDON

ISAIAH (IKE) GORDON, for 29 years with the Bureau of Safety, Inc., Chicago, died September 1 in Fort Lauderdale, Florida. He had retired October 1, 1946.

"Ike" Gordon was known to thousands of employees of the utility companies served by the Bureau of Safety, and he had much to do with getting safety organization started in many groups. Back in 1917 when he started with the Bureau, safety activities were still new and his energy and enthusiasm were invaluable in promoting the work. Of Ike Gordon, B. B.

AUTO-LITE INSTALLS RANDOLPH AUTOMATIC FIRE KILLING SYSTEM

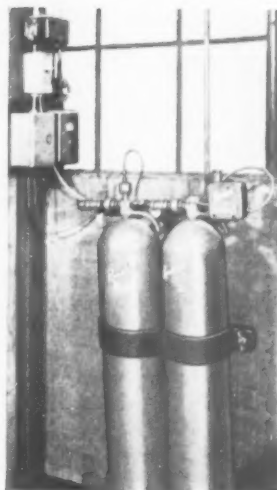
A dip tank with conveyor and bake oven operation at the Auto-Lite plant in Bay City, Michigan, presented an unusual and worrisome fire hazard until solved by Randolph fire-prevention specialists. The Randolph automatic electric system shown, not only detects and extinguishes any fire that might occur in the unit, but also sounds the alarm and shuts down the conveyor.

Kills Fire, Sounds Alarm and Shuts Down Machinery

As in the Auto-Lite installation, Randolph Systems, in addition to automatically killing the toughest fires in split seconds, can also be equipped with duct and door closers, motor, fan and machinery shut-offs, warning alarms and other auxiliary safety devices. Systems are designed for both local application or total room flooding and are ideal for dip tanks, baking ovens, spray booths and hundreds of other applications.

Free Catalog and Engineering Service Available Without Cost

Randolph's FIRE HAZARD INDEX gives correct equipment and methods for protection against 590 typical fire hazards. Write for your free copy today. Address: Randolph Laboratories, Inc., 2 E. Kinzie St., Chicago 11, Ill.



Twin Randolph CO₂ Cylinders deliver 100 pounds of powerful Carbon Dioxide in less than 20 seconds.

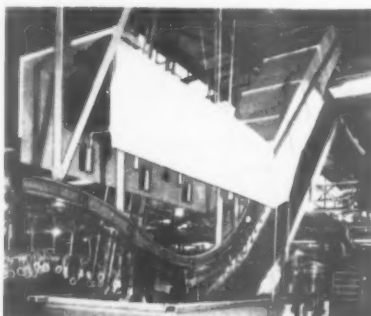
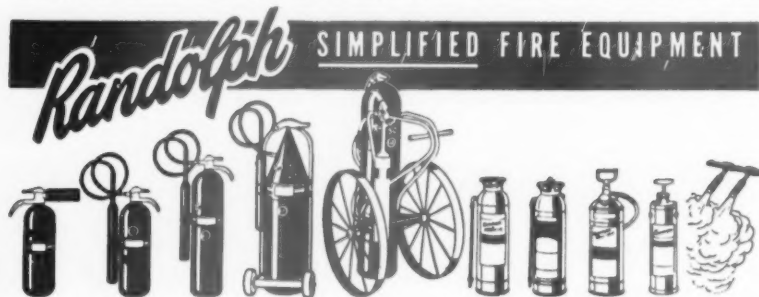


Photo above shows Randolph Extinguisher Nozzles spaced for complete coverage of dip tank and conveyor hazard.



McCulloch, president of the Bureau of Safety, said:

"Ike was a super-salesman. He had the oratory of William Jennings Bryan and the energy and showmanship of Billy Sunday. He could bring tears to the eyes of the most hard-boiled lineman, and when he completed a talk, his audience was impressed with the need for personal caution and each one knew that Ike Gordon was a personal friend."

ASKED and ANSWERED

Assistance with problems of accident prevention and industrial health is offered by National Safety Council. All inquiries are answered by mail and a few topics are selected for publication.

Revolving Doors

Question: Do you have any information regarding revolving doors?

Answer: Generally speaking, the types of accidents reported from revolving doors fall into two broad classes: Major calamities resulting from failure of doors to collapse (as in the Cocoanut Grove fire), and injuries occurring in normal use.

The most common cause of injury is the striking of a person, who, because of age or other infirmity, fails to clear the wing behind him. The same type of accident occurs when the door is not braked adequately and revolves at too high a speed. There is one case on record, for example, where an elderly woman suffered broken pelvic bones in a bank because some roughneck was able to rush her off her feet.

Accidents likewise are caused when people are caught between the revolving door wing and the door frame. There is some mitigation of such injuries because of the felt and rubber wipers along the edge of the door wing.

Likewise, persons sometimes fall in the door while it is turning, or fall just before or just after leaving it. Such accidents are not directly attributable to the nature of revolving doors, but rather to

poor maintenance of floors. Poor lighting of the doorway, or its approaches, may be blamed for some injuries.

Occasionally, claim is made by people who say they have suffered strains in the attempt to push a door which offers too much resistance.

Here are some preventative actions:

1. Inspect each revolving door carefully and constantly for mechanical operation. Renew drag flaps as soon as needed. Check other braking mechanism constantly.

2. Put the words "Slowly, Please" on each wing of the door at appropriate eye level.

3. Install enough bars across the glass of each wing to assure that users will not push against the glass.

4. Have the building maintenance people (several times daily, if necessary) check floors, clean entryways, dry floors, unobstructed areas entering and leaving the doors.

5. If the floor material in the doorway is such that the bottom wiper constantly makes it slippery, replace with a floor of slip-resistant material.

Faulty installation is sometimes responsible for injury, particularly when there is not room at the outgoing side of a revolving door to permit people to move quickly out of the way.

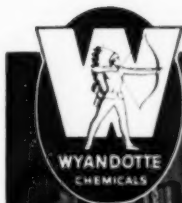
Carbon-Tetrachloride

Question: We are endeavoring to discourage the use of and ultimately discontinue carbon-tetrachloride for cleaning purposes. However, in our general offices we have a multitude of typewriters and other office equipment which the operators feel periodically must be cleaned with carbon-tet. Our difficulty lies in finding a solvent that is not toxic and non-flammable.

Answer: We look with considerable disfavor on the use of carbon-tetrachloride as a cleaner except under properly controlled conditions. Properly controlled conditions would not include the use of a rag or brush and an open container of solvent.

To the best of our knowledge,

Specialists in Industrial Cleaning Products



Zorball—another helpful Wyandotte Chemicals product at work

Only ZORBALL (of all absorbents) brings you these extra benefits

IMAGINE the lasting safety, reduced cost and improved "housekeeping" that will come your way with these three outstanding features of all-purpose Wyandotte ZORBALL:

First, ZORBALL (a different absorbent made only by Wyandotte) does not cake or break down to dust. Nor can it be tracked all over your plant.

Lasts longer, cuts costs

Second, ZORBALL continues to be skidproof even after absorbing saturation quantities of oil, paints, fats, chemicals or water. This continued effectiveness means longer-lasting protection against slipping and skidding accidents.

Third, ZORBALL can be swept up easily, in just half the time it takes to sweep or scrape away absorbing materials that become soft, sticky, greasy. And, after drying out, it can often be used over again!

Ask your Wyandotte representative to show you how **Zorball keeps floors safe longer . . . and reduces absorbent costs.** He will also give you information about other Wyandotte products designed for better cleaning and maintenance. **Wyandotte Chemicals Corporation, Wyandotte, Michigan; also Los Angeles 54, California.**



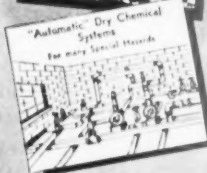
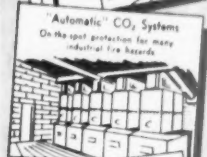
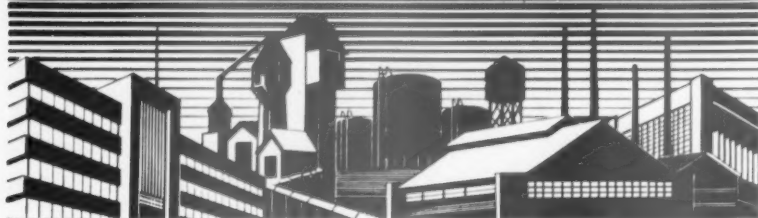
Largest manufacturers of specialized cleaning products for business and industry



Wyandotte CHEMICALS

Helpful service representatives in 138 cities in the United States and Canada

we put the "Automatic" in FIRE PROTECTION



You've no doubt read or heard from time to time that one or another type of fire protection is the correct answer to your safety problem. One says foam is best. Another says water sprinklers are the answer. Perhaps carbon dioxide, dry chemical, or other media will do the trick.

What is the most effective method?

Without a thorough understanding of all conditions involved, we wouldn't hazard a guess. For fire protection, like any other scientific problem, requires (1) technical know-how, and (2) application of that knowledge. Most methods of fire safety are good . . . but only through "FIRE PROTECTION ENGINEERING"—designing, manufacturing and installing the specific type of system *best by test*—can you be sure of maximum safety.

So, we take all methods of fire alarm and control, combine them with extinguishing mediums—FIRE-FOG, Air Foam, Sprinklers, etc.—and compound the results by adding "Automatic" technical know-how as well as test and field experience. The result . . . the finest "Automatic" FIRE PROTECTION available at any price.

The subject is more vividly covered in our colorfully illustrated literature, "The ABC of Fire Protection." Write for free copy today.

"Automatic" Sprinkler

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OFFICES IN PRINCIPAL CITIES OF NORTH AND SOUTH AMERICA



there is no solvent that is not toxic and is non-flammable. However, it would seem that a naphtha-type solvent such as Stoddard solvent or any similar material having a flash point higher than 100 degrees F. would be quite safe to use. With such a material as this, you could practically forget about the toxicity problem, and there would be very little hazard from fire.

Printers have a similar but much aggravated problem in cleaning printing type. There are several companies which manufacture type washes for this purpose wherein an attempt is made to overcome both the toxicity and flammability hazards. One such product, for instance, is a mixture of solvents wherein the toxic and flammable vapors given off tend to dilute each other, thereby reducing both hazards.

THE READERS' POINT OF VIEW



Comments on topics of current interest are invited. They need not agree with the editors' opinions.

Cases for Comment

BAYONNE, N. J.—I read with interest your "Cases for Comment" August article entitled "Doctor Didn't Understand Job." From the facts as stated, I cannot understand the basic logic of the committee in calling this a non-lost time accident.

It seems to me a major factor of Safety Programming is involved in this case. Is an employee, with one eye patched, a safe worker for himself or his fellow employees? What would happen if this same employee got a splash of lime slurry in his other eye? Wouldn't we have a temporary blind man, at that instant, at that job?

Can he honestly do all of his regular duties as safely as before, for himself and his fellow employees, such as handling material, walking, going up and down

stairs, reading gauges, checking weights, etc. I do not know what the duties of such a chemical operator are, and I presume he might get by. But isn't "getting-by" one of the hazards we continuously are trying to combat safety-wise.

I suppose the best answer in this case would be the company's own Personnel Department's answer to the question—Would you hire an employee who has sight only in one eye; for that job?

Safety records are fine (and how nice our Lost Time Frequency would look if we had available "Safety Department employees who could drive their people 20 miles for treatment by picking them up and bringing them back the same day and still say no lost time accident") but they shouldn't be cheapened by so-called "Chinese Home Runs." Would appreciate comments on this subject.

GEORGE MATWES, Safety Director
American-Standard

Editor's Note: The consensus of staff members familiar with the Code is that the committee interpreted it correctly in ruling this case non-reportable. Any criticism, therefore, applies to code rather than to the interpretation. The code was written by the people who use it through their representatives in industry associations, not by the committee.

Methods Engineering Added to Safety Course

"What The Safety Man Needs To Know About Methods Engineering" is the newest subject added to the curriculum of the Safety Training Institute's course, "Fundamentals of Industrial Safety."

"Hazardous Arrangement and Procedure" is listed in the statistics as the unsafe condition most frequently connected with accident occurrence. The table in *Accident Facts* shows that for all industries hazardous arrangement and procedure is present in 34 per cent of the injuries causing permanent impairment or death. This, as compared to 25 per cent for improper guarding.

Because of this frequency with which hazardous arrangement and procedure pops up as a cause of

Ready for you after 12 months of brutal

**CUSTOMER
TESTING!**



CLARK'S New and Exclusive HYDRATORK DRIVE*

Here's how it improves your fork-truck operation:

- 1 **MORE WORK:** faster get-away, positive power without slippage; moves heavy loads and climbs ramps with ease.
- 2 **LOWER COST:** higher percentage of "on-the-job" time results from no clutch problems, "cushioning" effect on motor and drive members.
- 3 **GREATER SAFETY:** hydraulic brake system, linked to torque converter, automatically cuts power; engine cannot be started unless controls are in neutral.
- 4 **IMPROVES DRIVER EFFICIENCY:** finger-tip direction control and elimination of gear-shifting conserves operator energy.

Not one, but *eighteen* HYDRATORK-equipped trucks were placed in customers' plants for a full year of on-the-job testing. Without exception, these units proved that reduction in driver fatigue and of truck downtime results in greater production from HYDRATORK-equipped trucks.



* Now available in
6-7000 lb. capacity
truck

Mail the coupon for detailed
literature which explains
how CLARK'S new and
exclusive HYDRATORK
DRIVE operates.

CLARK ELECTRIC, GAS, DIESEL, L.P. GAS
AND POWERED HAND TRUCKS - INDUSTRIAL TOWING TRACTORS

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Please send: ☐ Hydratork literature ☐ Condensed catalog
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THE ASSURED *safe* WAY
TO HANDLE FLAMMABLE LIQUIDS

EAGLE SAFETY CANS

LISTED AND LABELED BY
UNDERWRITERS' LABORATORIES, INC.

PROTECT
PLANT
AND
PERSONNEL
—
MINIMIZE
FIRE
HAZARD



Eagle Safety Cans are specially designed and built under rigid specifications to meet all safety regulations for handling, transporting and storing flammable liquids in every industry.

They include many exclusive Eagle features such as protecting Guard Cap that seals tighter if can is upset; Combination Free-Swing Carry and Operating Handle; Cam-Acting Connecting Arm for easy pouring and seal-tight assurance; guaranteed-against-leakage construction—one piece, no seam bodies; and, body and breast electrically welded together under electronic control . . . features which provide extra convenience, safety, efficiency, economy and long service.

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industrial injuries, it seems that safety men ought to be getting some special training in the techniques of methods engineering in order that they may give intelligent attention to the matter of job arrangement and procedure. In fact, this subject has come up frequently in the round-table and open forum discussions during the course.

Starting with the November class which will be held November 9-13, the subject will be given a two-hour period and will be taught by a professional methods engineer who has had recent experience in job revision for safety.

Class enrollments for the year November 1952-November 1953 have been filled and there is a waiting list, indicating an increased interest in the organized study of accident prevention methods. This is the first full year that the Institute has taken 30 students per month instead of the 15 students per month which had been the number since the courses started in 1946. Taking the increased number has been accomplished without making the classes larger by the simple expedient of operating two sections simultaneously.

The course in Safety Management Techniques does not feature the fundamentals of accident prevention but covers subjects such as psychology, writing, speaking and conference leading was conducted twice during 1953, the first year that more than one class has been held since the course was organized about 1943.

Dates for 1954 have been announced. The course in Safety Management Techniques will be conducted January 13-22, 1954, and April 12-16, 1954.

Dates for the Fundamentals of Industrial Safety Course are:

February 15-19
March 15-19
May 10-14
June 7-11
November 15-19
December 6-10

A specialized course for electric utility safety men will be conducted in connection with the May class. The subject matter will include much of the material regularly taught in the course in fundamentals, and there will be special sessions dealing specifically

with electric utility safety. The curriculum has been worked out by the staff of the institute in co-operation with men from the public utility section and some of the instructors will be leading safety men from public utility companies.

Seventeen instructors from the Council staff teach in the institute's courses, making this an increasingly important part of the activities of the Industrial Department of the Council.

The Brass

—From page 113

insurance costs in his earnings statement. Inflation has hit insurance premiums, damage claims and jury awards like everything else. Moreover, carelessness and faking for easy sick leave payments, drive home the lesson that a dollar of prevention is worth ten dollars of compensation.

What's more, he has to recognize in some states if not in all that there is a growing generosity in the awards and administration of compensation cases. With a lame back and a friendly examiner in the State Office a janitor can better afford to stay home, particularly when a brilliant decision in the tax department says that compensation for illness or accident is income tax free. So it all adds up to more expense and less earnings when employees or customers are careless.

What is of greater importance is that the department or company with the high accident record loses very rapidly its esprit de corps. All the fanfare in the world directed toward prospective employees, all the intensive efforts toward morale building among physical, clerical and administrative workers is useless muscle exercise when danger lurks in every corner. "So Green Was My Valley" is a mere nostalgic idiom when safety no longer travels the highways of the land or works in the shops or mine.

America is short 850,000 beds in its hospitals to care for sickness, accident and death. The expansive force of senseless inflation stretches the capital cost of that deficiency as each month rolls by. If it costs \$20,000 a room to provide average hospital accommoda-



... THEN WE INSTALLED ALGRIP And Ended Slipping Accidents And High Insurance Costs!



It happened at a large industrial plant, where oil and grease on a loading platform created a constant hazard. A lift truck skidded on the slippery surface, toppled from the platform's edge, and crushed the operator to death.

ELIMINATED:
Accidents like this
—which cost a
man his life

SAVED:
\$20,000 in Additional
Compensation
Premiums.

Then A.W. ALGRIP Abrasive Rolled Steel Floor Plate was installed on the platform—and slipping accidents ended at once. For ALGRIP is truly non-slip—even on steep inclines! Hundreds of tiny abrasive particles in each square foot of ALGRIP converted the slippery, dangerous platform into a hard gripping, anti-skid surface—safe for men and vehicles alike.

IMMEDIATE SAVINGS were obtained in three ways: (1) *No more costly, morale shattering accidents.* (2) *Faster handling of loads.* (3) *Workmen's compensation insurance premiums were substantially reduced by more than enough to pay for the ALGRIP installation.*

END SLIPPING ACCIDENTS THAT STEAL PRODUCTION AND KITE INSURANCE RATES

A.W. ALGRIP—only abrasive rolled steel floor plate in the world—pays for itself in savings from safety. Tough abrasive particles (same kind used in grinding wheels) put hundreds of tiny safety-brakes in every footstep—make it virtually impossible to slip even on steep inclines. ALGRIP doesn't wear smooth either—wear only exposes new particles. And tough rolled steel makes this floor plate stronger than other abrasive floorings. For safety at a saving, get the full ALGRIP story today. Write for our new Booklet **AL-14**—without obligation.

Over 125 Years of Iron and Steel Making Experience.

ALGRIP Abrasive Rolled Steel Floor Plate
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Other Products: A. W. SUPER DIAMOND Floor Plate • Plates • Sheet • Strip
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IT'S PERSONAL!

Fight ATHLETE'S FOOT the New Sanitary Way



**KILL ATHLETE'S
FOOT Fungus
with Individual
Foot Treatment**

- 1. Step on**
 - 2. Mark time**
 - 3. Step off**
- That's all!***

no dilution • no contamination • no re-used solution

The SANI-MISTER Spray Dispenser is the most sanitary device yet developed for protection against the spread of Athlete's Foot fungus in your plant's shower rooms.

Every foot treatment is individual—clean, full-strength, uncontaminated. No shower drippings can dilute it. No previously used solution to cause possible infection.

According to laboratory tests, SANI-MIST solution kills *Trichophyton mentagrophytes*, the principal fungi causing Athlete's Foot, in less than 30 seconds. The SANI-MIST method is economical too. Costs only a few cents a day. For complete details mail coupon today.

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Please send me complete details of the safe, clean SANI-MIST method of Athlete's Foot prevention.

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COMPANY _____
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CITY _____ ZONE _____ STATE _____

tions it surely appeals to the executive, and probably to everyone else, that here is a chance for economy. The money spent in accident prevention is much more effective as something *before* the event than the expenditures through subscriptions or taxes to provide hospital facilities *after* the event.

These factors all add up to the *why* of safety.

Let us look now for the *who*.

If it is true, as I have said previously, that safety is a theatrical production, then surely a quotation from the patron saint of that art, William Shakespeare, is appropriate. The dialogue of Act Two in *As You Like It* fits our thought:

*This wide and universal theatre presents
More woeful pageants than the scene
wherein we play in—
All the world's a stage,
And all the men and women merely
players.*

My thesis is that accident prevention does not stop at the executive or departmental level—nor even at the level of all the employees of any particular enterprise.

The favorite hue and cry of the professional safety first-er is that the president of the concern must give his personal concern and attention to every facet of accident prevention. He cries that the president and a safety director reporting directly to him solve the matter at once and permanently. It is a shibboleth that accents his shallow knowledge of the problem.

He is no sooner out of the office than the representative of the firm of experts who will conduct the company to perfect safety makes his oleaginous pitch. Let the president send out the word that he is for safety and then the firm will provide all the special paraphernalia that will create the miracles.

Have you ever contemplated the plight of the utility president as he considers the generous offers, for fees, that consultants of all kinds will render him and his company, in order that he and his major assistants will be free to generate atom smashing conceptions that will rock the world? He can get all his accident prevention program, engineering, market surveying, sales plans, advertising,

publicity, printing, legal matters, tax solutions, public relations, rate studies, auditing and a flock of other jobs, done for him by overeager hands.

And the result is that he has lost touch with his business and his organization is a group of robots who call the specialists for instructions. What the heck do they pay this president \$50,000 or more a year for if not to think up, head up and run all the diverse elements of the business?

Otherwise the company goes the way of the concern in this anecdote:

New Girl Employee: Say, does the company pay for our Blue Cross?

Old Timer: No, you pay for it; it's taken out of your pay every month.

N.G.E.: Last place I worked they paid for it.

O.T.: Did they give you a life insurance policy, too?

N.G.E.: Sure.

O.T.: Profit-sharing?

N.G.E.: Sure.

O.T.: Two and three week vacations?

N.G.E.: Sure, and they had big bonuses, and gifts for your birthday, and—

O.T.: Why did you leave?

N.G.E.: They folded.

No, safety is not in the grasp of one man. The president must believe in it, the safety department must work at it. They cannot do the job by themselves. Everyone in an organization must be steeped in it. Accident prevention is like public relations, an atmosphere, a climate, a permeating belief, a permanent, persistent policy.

When a company makes somebody director of public relations and then drops the entire subject in his lap so that the organization goes blissfully on its way there will never be the maximum of effective result. Good public relations is an inherent part of the company machine, every employee knows about it, keeps it ever in mind, works for and with it day in and day out.

So with safety. It does not stop at the street department truck, the meter reader's car or the gas maker's coal buggy. Success smiles only on that company where everyone is saturated with safety.

Speculation may be permissible, it may even be constructive, in the stocks and bonds of a utility company. It cannot be tolerated in the planning of the executives, the

3

REASONS WHY TOP NOTCH *Industrial* FOOTWEAR IS BEST!



BAR-FLEX

Patented outside arch and heel that adds to comfort and gives better traction.



Neoprene Oilace Boot shown is available with or without Bar-Flex feature. Neoprene—a special compound that resists oil, grease and acids. Also available, a short black industrial boot with DURATEST Bar-Flex outsole.



STEELTOE

Tested to withstand 2000 lbs. pressure! Here is genuine tested protection against toe injuries—the most common foot hazard to a worker!



Workin—6" all rubber work shoe with appearance of a leather shoe, DURATEST non-skid outsole, cushion insole. Steeltoe or plain. Also, a new Pullon work shoe, of similar construction.



DURATEST

A new "tougher" rubber compound that gives better resistance to abrasion resulting in longer wear. Tested for extra quality and durability — DURATEST.

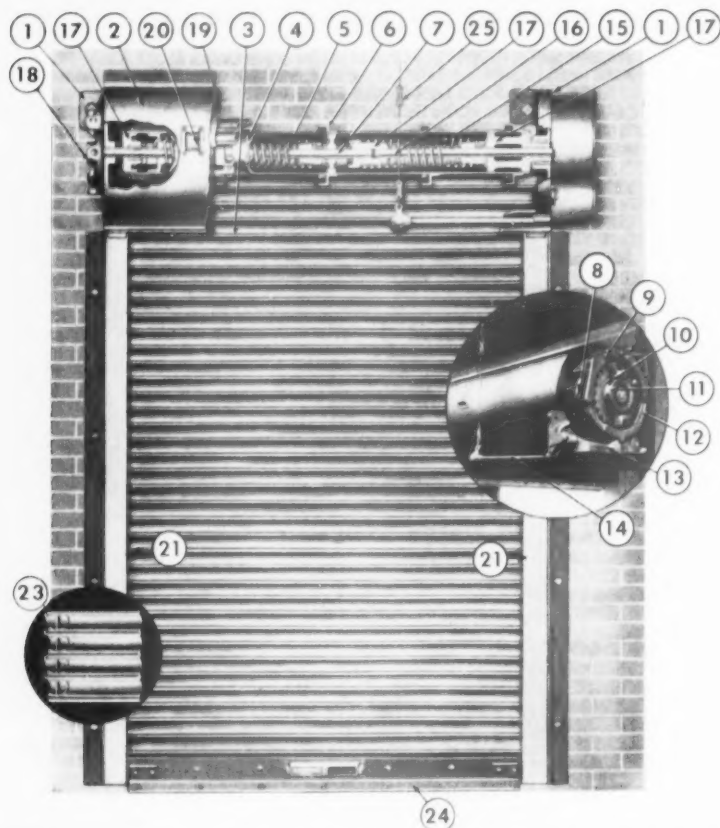


Red Buddy Mankato—Work rubber with stretchy uppers and special design DURATEST outsole. Available in black. Also, red or black 2 buckle styles, regular or logger heels, and black storm or hicut pattern with gray outsoles.

BEACON FALLS RUBBER FOOTWEAR
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AKBAR

Steel Rolling Fire Doors



offer 25-POINT FIRE SAFETY

Extra safety and efficiency are assured at every point of construction in "Akbar" Steel Rolling Fire Doors, product of the Kinnear Manufacturing Company, Columbus 16, Ohio.

Labeled by Underwriters' Laboratories, Inc., these automatic fire doors cut off drafts, block the spread of flames, confine losses to smaller areas. A starting spring assures quick, positive action when fire threatens. Another device controls their downward speed, for the safety of people passing underneath. Also, they may be opened

after automatic closure, for emergency exit. The doors remain coiled out of the way overhead when not in use.

Akbar Fire Doors can also be equipped for regular, daily service use, and with motor operation, if desired. (Regular non-labeled Kinnear Metal Rolling Doors are recommended where fire safety is not the major consideration.) Built to fit any opening, in old or new buildings. Write for details on the many safety and efficiency features of Kinnear "Akbar" Steel Rolling Fire Doors.

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1720-40 FIELDS AVENUE
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Offices and Agents in
Principal Cities



work of the employees, the running of the machinery. Above all economic, financial, public and industrial relation viewpoints and questions there is one predominant poser "Is it safe?"

One well used slogan in public relations is the admonition to every utility employee "Take a minute to say 'Thank you.'" For you people the battle cry is "Take five minutes to be safe."

Still the stage, the plot and the cast for safety extend beyond the affairs and the people of a utility company. It is only when the community, the state, the nation shall have awakened to the full meaning of accident prevention that we shall really be playing it safe. So long as the unlicensed hot rod driver, the bull strength truck pusher, the absentminded, the chance taker, the daring move among us our performance is handicapped.

I know from personal observation of the work in my own company that the great opportunity as well as the great challenge to the utility industry is to spread out into public safety and accident prevention work. To keep our own record good we have to work with crane, shovel and other heavy equipment operators, we must carry the story into the schools, we lend our assistance to the police in highway work and to the Red Cross in first aid, we keep after the newspapers and radio stations for constant publicity, we do everything we can to make the public conscious of their own interest and benefit in prevention work now.

We have made much music in rolling the drums for safety. Yet we still have a long tour before us if we are to reach "Journey's End." It is only when all are alert that all are safe. We are seeing in this country right now a great example of apathy toward individual chances of continued life. From a thousand towers the cry is for Civilian Defense and the nation walks along smug in the feeling of superior wisdom. One A-bomb deposited among us without calling card would produce Civilian Defense workers by the million.

Safety, too needs the awakening of all our people. There are not

enough people who are like the little boy at the village commons:

A small farming community was suffering from a severe drought. For weeks it didn't rain. Crops began to wither, streams dried up, fields baked hard, cracked, and were smothered with dry dust. Disaster threatened and at an emergency meeting of the town council it was decided to hold a community gathering and pray for rain. The day of the public prayer arrived and the townspeople flocked to the village square. But among almost three thousand beseeching souls only one, an eight-year-old boy, showed up with an umbrella.

In that atmosphere of prayer perhaps I can close on a scriptural line. It is not enough to publicize safety, to hold conventions, to attend committee meetings, to read magazines, to issue statements, or to make speeches. We need for our utility officers, for our utility workers, and most of all for our people generally a dynamic performance in the role of accident prevention. As the Epistle of James says: *For as the body without the spirit is dead so faith without works is dead also.*

Solvent Degreasers

—From page 160

the concentration was 65 ppm; at the edge of the tank it was 360 ppm.

Clean-Out Operation

Air determinations have shown the highest exposures are encountered in improper cleaning of degreasers. Most cases of serious illness have resulted from unsafe cleaning practices. Concentrations as high as 16,000 parts of vapor per one million parts of air have been measured in unventilated degreaser pits during clean-out. Concentrations inside unventilated degreasers are even greater. Degreasers are often cleaned during off-shift periods and escape proper safety supervision. Special supervision and instructions should be given on cleaning of the degreaser. If the degreaser is located in a pit, the pit should be ventilated by a suitable duct, extending to the bottom of the pit, and a fan of sufficient power to effect at least

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August 3, 1953

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Dear Mr. Manuel:

SUBJECT - SURE-FOOT NON-SLIP ABRASIVE PAINT

We have just recently reviewed several times of non-slip paints and coatings including some new local products recently on the market. Thought you might like to hear that once again we are going to continue to standardize on your Frost's Sure-Foot Paint.

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We use it on ladders of all types; for sale to industrial users such as painters, roofers, and tree-trimmers. It has proved durable to the correct degree. Then our main applications are to Federal Government, such as Aircraft, Armories, and the U. S. Navy requirements. Your crystals are durable, but not too hard where we get complaints of worn shoe soles, as on other lines. We find your Sure-Foot is the easiest of all to apply. It is lower in initial costs and lower in maintenance application costs. We have never had one single complaint, your material, and it is durable around airport flight lines, does not become spongy, or soft, and is apparently resistant to most of the problems of that application.

Good luck with Sure-Foot, and we shall continue to be a "booster" for you.

Sincerely,

ALAD ALUMINUM LADDER CORPORATION

F. A. von Baum, General Sales Manager

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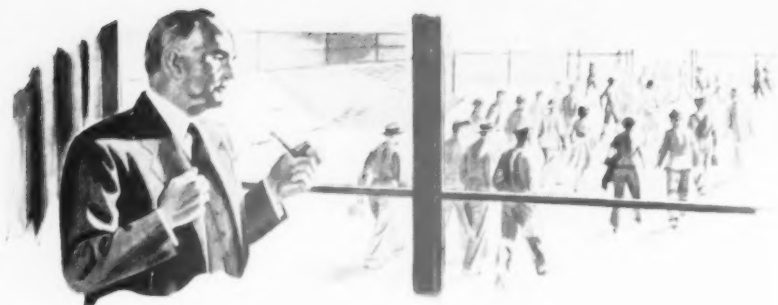
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two air changes per minute in the pit.

The clean-out operation should be done when solvent becomes so contaminated with dissolved oil and greases that the boiling point of the solvent is raised. A boiling temperature over 195° F. generally indicates clean-out is due. This temperature represents about 30 per cent oil contamination based on average-type oils and greases. With low boiling point contaminants (less than 190° F.), this percentage may be reached at lower temperatures. In some cases, the presence of excess quantities of chips and dirt (not soluble) may dictate more frequent clean-out periods.

First step in cleaning out degreasers is distillation of the solvent to the storage tank. The heating elements should never become bare during this operation. Following this, the heat is turned off and fifteen minutes later the condenser water is shut off. Oil sludge residue is then allowed to cool. This is important! Residue never should be handled hot, and a good practice is to let residue and degreaser cool over night.

The dirty residue is then drained off into a closed container. This should be done under conditions of good ventilation. Doors and windows should be open and ventilation fans should be turned on. Clean-out doors are then opened and heating coils are removed from the boiling chamber. It is not necessary to enter the degreaser during this procedure. If it should become necessary to enter the degreaser, the unit should be properly ventilated and all solvent vapors expelled. A sign should be posted, warning personnel not to enter unless another worker is in attendance. The workman entering must wear an approved air-supplied respirator. The use of the air-supplied respirator does not replace the need for ventilating the degreaser, as illness may occur from skin absorption in high vapor concentration areas even though the man is breathing uncontaminated air.

All closed conveyORIZED degreasers should be provided with a fan and a duct for ventilating the boiling chamber during clean-out and

maintenance operations. Figure 7 illustrates the fan and duct work for ventilating the degreaser. The fan should have sufficient capacity to effect two complete changes of air per minute, and should be run at least 30 minutes before a clean-out operation is started. If it is necessary for a worker to enter the degreaser, the fan should be run at least one hour before the worker enters.

Tests made inside a degreaser have shown concentration was dropped from a very high level (in thousands of parts per one million) to approximately 200 parts per one million, 5 feet from the floor of the degreaser in 30 minutes with a ventilation rate of 2 air changes per minute; and to 100 parts per one million, 5 feet from the floor of the degreaser after 1 hour. Concentrations 3 feet from the floor were approximately double the 5 feet concentrations.

Safe Operation

Operation of degreasers should be restricted to personnel instructed and experienced in degreaser operation.

Hand-operated degreasers are especially vulnerable to poor operation and need special precautions to control solvent vapor. The following are recommended procedures:

1. Open condenser water control valve before heat is turned on. Condenser water should be kept between 90° F. and 120° F.
2. Place parts to be degreased in metal baskets so proper drainage is effected. Cup-shaped parts should be placed upside down. Do not overload unit. (See manufacturer's recommendations.)
3. Work should be lowered into vapor area with an automatic hoist timed to a rate of 10 to 12 feet per minute.
4. Leave work in vapor until it reaches the temperature of the vapor. (No further condensation on the parts.)
5. Raise work slowly to a point just above condenser. Let it remain there until dry.
6. If nozzle spray is used, it must be carried out well below the vapor line. (At least six inches.)
7. Keep covers closed when unit is not in use.

Certain parts are difficult to drain because of fine cup-shaped recesses and capillary openings. These parts cannot always be placed in a position where drain-



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age can be effected. Such parts can be placed in rotating baskets, and the basket rotated before it is withdrawn from the degreaser. Figure 8 compares concentration of vapor during degreasing with cupping parts in flat baskets and rotating baskets.

Another method of preventing solvent carry-out on parts coming from a degreaser is to provide some means of tipping or tilting parts so the trapped liquid will run out below the vapor line. On certain stampings which are difficult to drain, a hole is sometimes punched to provide adequate drainage.

Solvent vapor loss is increased by pressure of excessive water in the solvent. This may result from introduction of wet parts into the degreaser or from the condenser water being too cold. If condenser coils are too cold, considerable water is condensed into the tank along with the trichloroethylene.

Most modern degreasers are provided with gravity water separators which reduce the amount of water in the degreaser, still every attempt should be made to minimize the amount of water introduced.

All degreasers should be provided with vapor-level safety thermostats. This prevents the room from becoming flooded with vapor if the condenser water is not turned on. This is not an uncommon occurrence, and it is often the reason for complaint from adjacent workers.

Automatic conveyORIZED degreasers can give high vapor concentrations if parts are not properly placed in baskets so proper drainage is effected. Speed of conveyor and the length of time parts remain in the degreaser are fixed.

On both hand-operated and automatic degreasers, leaks can be a source of solvent loss and solvent exposure to the worker. These leaks are not always large enough to cause dripping at union and pipe connections, so it is a good practice to check for slow leaks. Pipe connections, valves, and gauge glass fittings can be checked by determining whether the paint on adjoining surfaces is streaked or peeled.

—Next page



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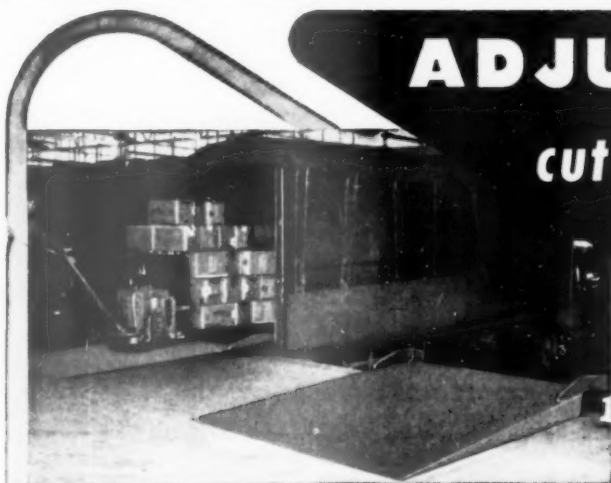
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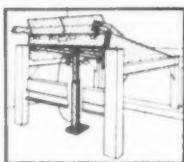
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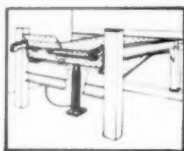
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Ventilation of Degreasers

The first approach to control of degreaser vapor is through proper location, design, operation, and maintenance. If control cannot be attained by the above means, local exhaust ventilation may be a necessary supplement. Tests on both hand-operated and automatic degreasers have indicated that in most instances adequate control can be attained without ventilation. However, in unusual circumstances, such as parts difficult to drain, and degreasers installed in locations of strong cross-drafts, vapor exposure may remain high even with good operation. Also, state or local regulations may require ventilation.

Proper degreaser ventilation is directed at providing just enough ventilation to control vapor (to a safe concentration) that would escape from an unventilated tank. Excessive ventilation increases solvent loss by drawing vapor, which should be retained in the tank, into the ventilating system. The quantity of air exhausted is, therefore, critical. A slot-type hood on one side of a narrow tank and on two sides of a wide tank should be used. (See Figure 9.) The required quantity of air exhausted has been shown to vary from 30 to 50 cubic feet per minute per square foot of tank area.^{4,5} It is recommended that the system be designed for 50 cfm per square foot of tank area and a slide damper be provided in the duct.

The degreaser should then be checked with an instrument to determine concentration of trichloroethylene vapor in the air. The airflow should be regulated, with the damper, to minimum airflow that will effect proper control. The damper should then be permanently fixed.

Where the carry-out of solvent on parts cannot be eliminated by rotating baskets, proper placing, tilting, or shaking of parts, it is necessary to provide mechanical exhaust ventilation. The best method is through use of a grill-top downdraft hood sufficiently large to accommodate the basket used. The required quantity of air exhausted is 50 cfm per a square foot of grill-top.⁶

Summary

Non-flammable chlorinated hydrocarbons, trichloroethylene, and perchloroethylene are used in solvent degreasers. Improper operating conditions can produce high concentrations of vapor which will result in illness in the worker.

Direct-reading instruments are available for determining vapor concentrations. Degreasers can be safely operated if vapors are controlled within the MAC.

Where practical, conveyORIZED or enclosed automatic degreasers should be used. Hand-operated degreasers are more vulnerable to improper operation. Homemade degreasers may be dangerous.

Degreasers should be located in well-ventilated spaces away from cross-drafts and flame.

The highest and most dangerous exposures occur during the cleaning out of degreasers. An outline of safe clean-out procedure is given. Degreaser pits must be ventilated; all conveyORIZED degreasers should be provided with mechanical ventilation available for ventilating the boiling chamber during clean-out. An air-supply respirator does not replace the need for ventilation, as illness may occur from skin absorption in high vapor concentrations.

Recommended procedures for safe operation of degreasers are given. Special attention must be given to hand-operated degreasers. Proper drainage of parts is important. This can be achieved by proper placement, rotating baskets, tilting, and tipping.

Where control of vapor cannot be attained by proper operation and location, local exhaust ventilation of the slot type may be necessary. Design factors for this ventilation are given. Vapor resulting from carry-out of solvent on the parts can also be controlled by local exhaust ventilation of the downdraft type. A great many tests have shown that in most instances adequate control can be attained without ventilation. State or local regulations may require ventilation.

Acknowledgment

Photographs Figures 1, 2, 3, 3A, 7 and 9, courtesy Detrex Corp., Detroit, Mich.

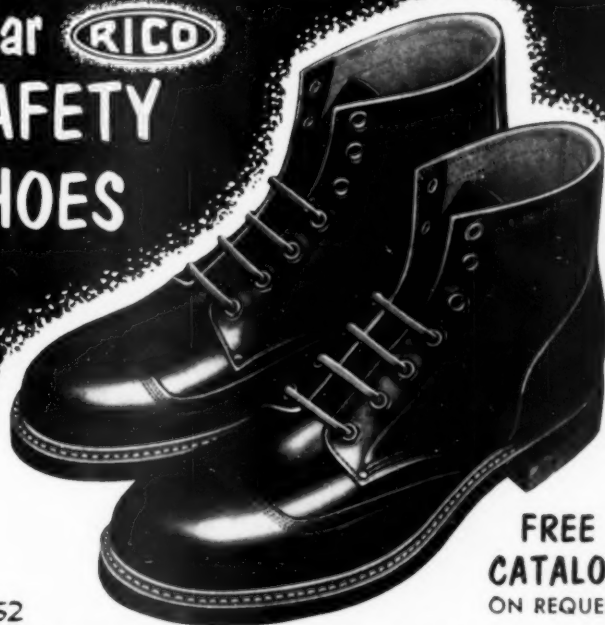
The author is grateful for assistance given by Mr. Ferd J. Chmielnicki, assistant secretary; and Mr. T. J. Kearney, chief engineer, Detrex Corp., for their contributions on the technical details of degreaser operation.

References

1. *Threshold Limits for 1952*. American Conference of Governmental Industrial Hygienists. *AMA Archives of Industrial Hygiene and Occupational Medicine*. August, 1952. Vol. 6. Pp. 178-180.
2. Skinner, John B. *Industrial Hygiene Quarterly*. 13:1, March, 1952.
3. *Solvent Degreasing*. Detrex Corp. Form 266.
4. Brandt, Allen D. *Manual of Indus-*

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trial Hygiene, W. B. Saunders Co. Philadelphia, 1953, P. 227.

5. Witheridge, William N. and Walworth, Herbert T. *Ventilation of a Trichloroethylene Degreaser*, *Journal of Industrial Hygiene and Toxicology*, 22:175, 1940.

6. *Industrial Ventilation*, American Conference of Governmental Industrial Hygienists, P. O. Box 453, Lansing, Michigan.

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- All Jackson headrests are of extruded plastic, hold their shape, are easy to clean and sterilize. Cork padded sweatband is inexpensive, easy to replace.



Type WR-50, shown left, has the same goggle assembly as type W-50, but is held by an adjustable elastic headband.

- Goggles for chipping and grinding have clear, hardened 50 mm. lenses. They are otherwise similar to the welding goggles described above, but vent screens carry no baffle plates.

Type G-50 with headrest

Type GR-50 with elastic headband

JACKSON EYESHIELD type J-1

A lightweight protection for eyes and face in metal finishing, metal pouring, spot, gun and flash welding, woodworking, etc.

- Plastic headrest is moisture proof, easy to clean, has replaceable sweatband. Spark deflector protects forehead.
- Fire repellent visors are quickly replaceable. They are available 4, 6, and 8 inches deep in a variety of shades and thicknesses.



Sold world-wide through distributors and dealers. For greater safety in the welding shop, use Jackson's famous insulated arc welding electrode holders and cable connectors.

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Guard sweeps across feed area on downward stroke of ram.

Flat arc of guard arm travel provides greatest possible protection. Entire guard easily swung aside for making press adjustments.

Send for Bulletin 135.

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Enclosure type guard, used for blanking and other first operation work, prevents operator from reaching in or coming in contact with moving die. Easily installed on any make punch press. Also available with clear plastic window. Write for free catalogs.



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SEARJEANT METAL PRODUCTS INC. No. 10 Pittsford Road, Menden, N. Y.

Green Cross Parade

—From page 156

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New Standard Covers Medical Gases

There is no margin for mistakes that cost human lives.

Acting on this principle, a group of manufacturers, military men and industrial researchers have drawn up an American Standard for eliminating one unpredictable hazard of hospital operation.

The standard is a safety code covering the use of medical gases. It prevents the accidental switching of gas containers on anesthetic machines.

The new safety code, developed under the leadership of the Compressed Gas Association, is made up of some 10 representatives of manufacturing companies, technical societies, and the armed services. J. J. Crowe, assistant vice president of the Air Reduction Company, New York, is chairman.

The committee developed the standard in cooperation with the American Hospital Association and the Association of Anesthesiologists. It was tested this spring in a number of large hospitals.

The safety code is called the *Pin-Index Safety System*. It forms an important addition to the 56-page American Standard B57.1, *Compressed Gas Cylinder Valve, Outlet and Inlet Connections*, recently published in revised form by the American Standards Association.

In this system, two pins are

Jackson for Safety

JACKSON Arc Welding HELMETS

High-compression molded of glass fiber thermo-setting plastic, one-piece helmet shells hold their shape, resist high heat, high voltage, moisture and weld spatter.

- Extruded plastic headgear has padded sweat-band and adjustable friction pivots that will permit helmet to float down without jolting, or stay in any desired position.



Stationary Front Helmet H-1 has light metal lens holder. Cover glass is replaced from the front by sliding it out, without disturbing other parts.

Lift-Front Helmet, type H-2, permits work inspection without raising entire helmet. Plastic lens holder has hinged door held by coil springs. Filter lens has cover glass, while a second clear glass stays in place when lift-front is opened.



JACKSON UNIGOGGLE type W-60

The first one-cup headrest goggle made for gas welding, cutting and brazing. Plastic lens frame bears gently but firmly against face.

- Goggle pulls forward and up to clear various prescription glasses now used. It's worn slightly lower than other goggles for comfort.
- Lens is standard 2 x 4 1/4" size in shades from 3 through 6, protected by a cover glass. Both are easy to replace.



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placed on the yoke connections of medical gas cylinders, each pin in a different position for each type of gas. Two holes are placed in a corresponding position in the valve connection of the gas cylinder. Since there is only one combination of pins and holes for each gas, it is impossible to use the wrong gas. If the wrong cylinder valve is tried, the holes and pins will not match and the two parts will not fit together. A similar system further insures the patient's safety by making certain that the cylinder corresponds with the type of gas with which it is being filled.

Hospitals are rapidly adopting the new system because they can easily convert their existing anesthetic equipment without waiting for replacement with new, up-to-date equipment. A yoke adapter fitted with the appropriate pins slips onto the yoke of the gas machine.

The new standard will be used internationally. It has been approved by the Canadian Standards Association and has been accepted by British industry and medical circles.

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Ordinary rubber chair tips on projecting parts, such as rods and poles and sharp edges, will prevent many scratches, abrasions and torn clothing of machine operators and others. Chair tips are economical and easily obtainable in various sizes at variety and hardware stores.

Give Gladly



THE UNITED WAY

Safety Followed Through

—From page 109

a later meeting held in Chicago in June, there developed so many "new ideas and phases and new visions of what might be done by such an organization" that a special committee was appointed to revise the proposed constitution and by-laws to include these new plans. This committee included Robert W. Campbell, chief of the legal staff of the Illinois Steel Company, David Van Schaack, Arthur T. Morey, of Commonwealth Steel Company, G. L. Avery, and Ralph C. Richards.

About 200 persons attended the second safety congress in New York, September 23-25. To carry forward their safety ideals, the delegates created the National Council for Industrial Safety, with Robert W. Campbell as its first president. Its objectives, as outlined at the organization meeting, were:

1. To establish a conveniently located headquarters as a clearing house of safety information available to all concerned.
2. To encourage and promote throughout the country the organization of local councils affiliated with the National Council.
3. To hold annual congresses at which all persons interested in accident prevention and kindred subjects may take part, and also have an opportunity to examine exhibits; to publish and distribute proceedings of these congresses; to give awards for meritorious exhibits, safety devices and other accomplishments.
4. To encourage and assist in the practical standardization of safety devices, safe conditions and safe practices.
5. To give wide publicity, through its own publications and other channels, to all matters calculated to promote industrial safety.
6. In general, to initiate, promote, cooperate with and obtain the assistance of all agencies concerned with the conservation of human life in the Nation's industries.

Serving on the first executive committee were: Ralph C. Richards, Charles L. Close, David Van Schaack, Ferd C. Schwedtman, Lew R. Palmer, H. M. Wilson, C. W. Price, Edwin R. Wright, E. G. Trimble, G. L. Avery, Charles Piez, Arthur T. Morey, Robert J. Young,

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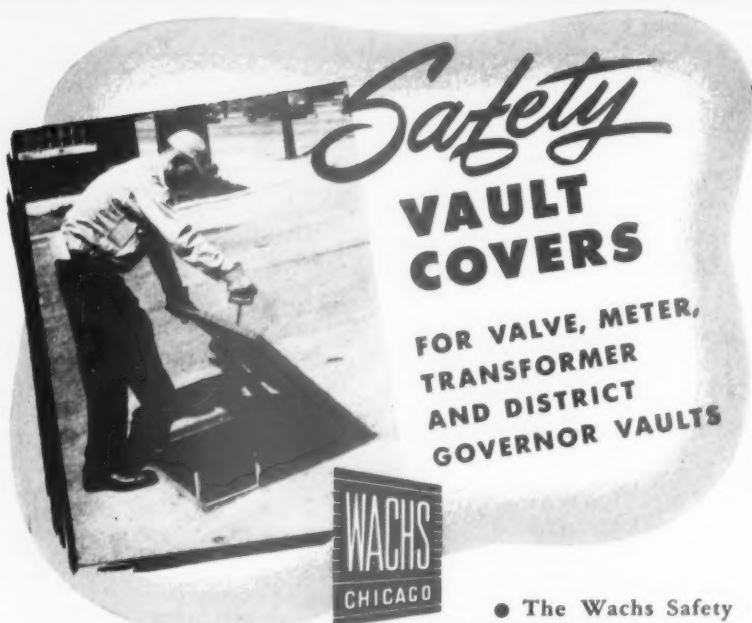
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Robert W. Campbell, William H. Cameron.

Management of the new Council required the services of a full-time secretary, and the job was far from attractive. It promised uncertain paydays and plenty of sleepless nights and frustrations. But the executive committee found their man.

The skipper who took the wheel of the frail newly launched craft was William H. Cameron who had been manager of the casualty department of American Steel Foundries. He was a pioneer in industrial eye protection, saving many eyes with the makeshift goggles then available, and had played a conspicuous part in the first two safety congresses.

A Scotch Canadian with strong convictions and an amazing capacity for concentrated effort, Cameron managed to instill drama into a cause that had seemed passive and negative. And he did much to convince a doubting world that accident prevention had measurable economic value. With the exception of a brief period in 1919-20 he remained at the helm until his retirement in 1942.

Within three weeks after the New York Congress the National Council for Industrial Safety opened an unpretentious office in the Continental and Commercial National Bank Building at 208 South LaSalle Street, Chicago. In this building were the executive offices of Illinois Steel Company, the organization which gave the Council its first president.

In launching the Council and during its early trying days Campbell's legal and organizing ability and experience and his eloquent leadership were invaluable. In the steel company's offices was another able and valued friend, Robert J. Young, then head of the safety department. Young's experience in accident prevention work antedated the national organization by many years and his time and experience were always at the service of the Council.

Right from the start, the Council received recognition from the press. On page 1 of the *Chicago Tribune* for October 17 was a by-line feature story announcing the new organization. As a news story

Looking back from the turmoil left in the wake of two world wars,

Put Safety Brakes On Your Floors




There is new safety in walking when floors are finished with Ves-Cote . . . because Ves-Cote contains a new and proven anti-slip agent, DuPont's "Ludox"* colloidal silica. These minute particles of "Ludox"* create excellent sole and heel traction—offer effective braking action for each step.

In addition to safety, Ves-Cote dries to a high lustre; is long-wearing; water resistant; easy to apply and dries quickly.

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30 MIN
PARKING
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5:30 P.M.

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ENTRANCE

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EXCEPT ON
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one might think there were no serious problems in the world in which the National Safety Council was born. Each age, however, has had its own problems; social, economic and political. Working underneath the seeming tranquility of 1913 were forces which were soon to blow the lid off the world's peace.

Although war was far from America's thoughts 40 years ago, the men who met to complete the

organization of the National Safety Council were facing a serious problem; one that affected the welfare of millions of workers and their families and the economic interests of the country's industries.

The traffic accident situation had not yet forced itself upon public attention but industry was suffering nearly 35,000 fatalities a year and an unknown number of disabling injuries.

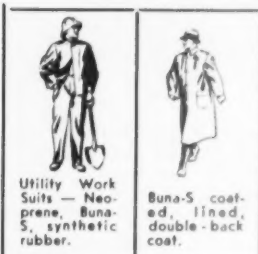
With far fewer industrial poi-

sons than are in use today, occupational diseases were taking a heavy toll because of ignorance of even the elementary precautions.

Industry was perplexed and not a little worried. Recently enacted workmen's compensation laws were increasing operating costs. Public sentiment had been aroused by several vivid magazine articles describing the conditions under which men worked in transportation and the heavy industries.

Industrial leaders generally were sincerely interested and anxious to learn the techniques of accident prevention, although many were skeptical. A few companies had already started safety programs and it was from the experience of these that a coordinating organization was made possible. A few industrialists were callously indifferent, taking refuge behind the excuse of the incurable carelessness of human beings.

The country was looking for a remedy for accident ills, yet the difficulties of organizing the nation



Utility Work Suits — Neoprene, Buna-S, synthetic rubber.



Buna-S coated, lined, double-back coat.



Industrial Aprons — all types, sizes.



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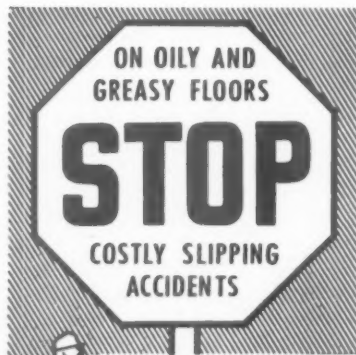
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and selling it on an intangible proposition were enormous. Skepticism, fatalism—even hostility—were prevalent. But the sponsors of the movement had faith, enthusiasm and fortitude.

An interesting story might be written about the unknown pioneers of safety: the men who had been working to prevent accidents in their own companies before the organization of the nation-wide safety movement. Their work made possible the first Cooperative Safety Congress and the 40 years of progress that has been recorded. The men who could supply the details have been gathered to their reward and only scattered fragmentary records have been left.

The Proceedings of the Second Congress, however, does contain a partial list of companies which had been carrying on safety programs for years and whose experience provided the programs for several sessions. The organizations represented in the program included the industrial commissions of Wisconsin and Pennsylvania and the following organizations:

sin and Pennsylvania and the following organizations:

Brown & Sharpe Manufacturing Company.
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Carnegie Steel Company.
Chicago & North Western Railway.
Chicago Railways Company.
Clairton Steel Works.
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E. I. du Pont de Nemours & Company.
Employers Indemnity Exchange.
General Electric Company.

Harrison Bros. & Company.
Illinois Steel Company.
International Harvester Company.
Lackawanna Steel Company.
Middle West Utilities Company.
Midvale Steel Company.
National Cash Register Company.
New Jersey Zinc Company.
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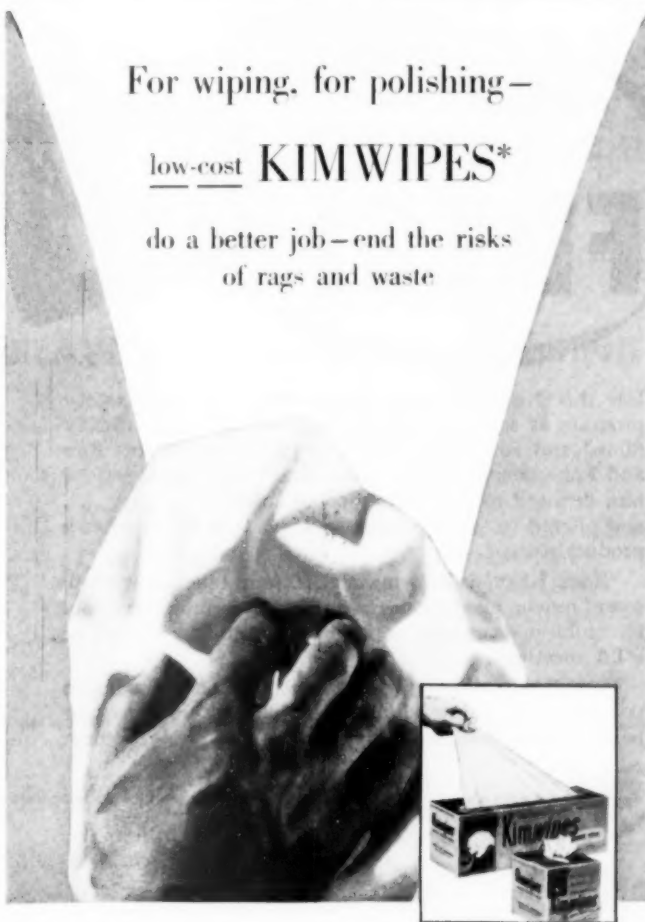
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National Safety News, October, 1953

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Here's a soft, clean, absorbent tissue made especially for precision polishing and tough-job wiping. Kimwipes industrial tissues are non-abrasive—you'll never have a worry about scratching, linting or disintegrating. Strong enough, too, for most any

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Safety Films

THE FOLLOWING films were produced, or released for national distribution, after the appearance in the June issue of the 1953-54 edition of the *Current List of Safety Films*.*

Railroads

The Freight Goes Through (16mm sound motion) color, 20

min. Production date, 1952. Emphasizes the importance of each individual's observance of freight handling rules by showing what happens to cars and lading when trainmen, enginemen and yardmen don't use their skills properly. Illustrates the direct relationship between the number of available jobs and the loss of business to other forms of transportation through damage of goods and accidents to personnel caused by carelessness in railroad freight transit. Source: Association of

American Railroads, Freight Loss and Damage Prevention Section, 59 E. Van Buren St., Chicago 5. Availability basis: purchase.

The Voice of Safety (35mm sound slidefilm) color, 15 min. Production date, 1953. Sponsored by the Missouri Pacific Lines and narrated by Edwin C. Hill, this film presents a new approach to an old problem—safety consciousness! It tells of the "inner voice of self-preservation" possessed by all that warns us of dangers not always consciously noticed, and stresses the importance of developing a safety consciousness which will always be on the job no matter where the worker is or what he is doing. At the end the audience is requested to join in singing a specially written "Song of the Voice of Safety." Source: Premier Radio Enterprises, Inc., 3033 Locust St., St. Louis 3, Mo. Availability basis: preview, purchase.

Public Utilities

Pole Top Rescue (16mm sound motion) color, 29 min. Production

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Safety Film

FREE!

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EXIT

Use this fine safety film, "SAFE EXIT," in your safety program at school, plant or club meeting. Dramatically filmed and edited by the makers of VON DUPRIN Fire and Panic Exit Devices, "Safe Exit" is a public service film devoted to the promotion of safety education . . . and offered to you *absolutely free*. It is in no sense a product story.

"SAFE EXIT" is a 20-minute, 16 mm, black and white sound movie, ideal for use in any safety training program for children or adults or for informal luncheon club or PTA meetings.

It costs you nothing to show "SAFE EXIT"—not even postage! Just fill in and mail the booking coupon request below. Send it today . . . help promote safety all year long.

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Yes, we wish to show the 16 mm, sound, B & W movie, "SAFE EXIT."

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We understand film is absolutely rent-free, postage paid. We agree to return film the day following our showing.

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date, 1953. Illustrates the application of the Oesterreich method of pole top resuscitation. A line crew of a large electric utility company is shown applying this method under various conditions. Source: Edison Electric Institute, 120 Lexington Ave., New York 17. Availability basis: preview, purchase.

*The *National Directory of Safety Films*, a separately bound version of the *Current List of Safety Films*, can be obtained from the National Safety Council, 425 N. Michigan Ave., Chicago 11. Single copies are 75c.

Eye Injuries

—From page 121

ing acid or alkali solutions and producing a burn but by drawing water from delicate eye tissues (hygroscopic action), thereby destroying these tissues. This group of chemicals contains many we have known for years as well as many that are new. All need extra care, which means:

- a. Being sure fellow workers know how to irrigate at work site.

- b. That proper facilities for irrigation are readily available.
- c. That plant dispensary is well equipped for irrigation and care.

VIII. Chemical Injuries.

1. Degree of damage ranges from destruction of epithelial layer only up to "cooking" of cornea.

2. Burn of conjunctival surface of lids may cause adhesions to globe to develop. These are exceedingly difficult to correct, often requiring plastic surgery, especially in neglected cases.

3. In chemical injuries, (caustic especially) a later breakdown of corneal epithelium must be watched for. The cornea can heal completely and then break down later—even months later.

4. Acids may be less dangerous in concentrated solution, and then they can be very dangerous.

5. Fumes are deceiving. Chemical droplets dissolve in tears to form solutions injurious to tissues.

6. Chemical solutions or par-



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ticles cling to hands and face and can get into eyes. Irrigate all at once—copiously.

7. The kind of chemical makes no difference. Irrigate!

IX. Miscellaneous Items.

1. Be everlastingly alert for employee who reports "eye struck by foreign body while hammering, grinding or chipping," but no foreign body is visible. It may be an intraocular F. B. Send to eye doctor at once.

2. When an employee reports

"My eye is red"—danger! It may be conjunctivitis, iritis, glaucoma or hemorrhage. Differential diagnosis between conjunctivitis, iritis and secondary glaucoma is often difficult. A person can have all at once. Red and/or painful eye may be ciliary spasm, early infection, or rise in intraocular tension. Send patient to eye doctor at once.

3. Burns in region of caruncle often lead to closure of tear duct unless special attention is attained at once. All burns at inner edge,

lower lid need special attention at once. Send to eye consultant.

4. Multiple foreign bodies in cornea can be very damaging. Never attempt removal at first aid station.

5. Foreign bodies that lie under bulbar conjunctiva or are sticking into sclera must not be removed at first aid station.

6. Never pull out a wire or sliver or anything that has perforated and is sticking into the eye. Leave it alone and send to the eye doctor at once.

7. Common complaints:

a. Eye that feels "scratchy" or "sticky" may be conjunctivitis or F. B.

b. Tenderness of eyeball may be referred pain (sinus) or early iritis.

c. Conjunctivitis, if a contagious type, can produce epidemics and much absenteeism. It can be bacterial, or it can be virus leading to dendritic ulcer or epidemic keratoconjunctivitis.

First aid and dispensary care of all types of eye cases is of greatest importance.

The relationship of virus to trauma, flash, foreign body, etc.,

★ This man is not drunk . . .
He has Carbon Tetrachloride poisoning.

REPLACE CARBON TETRACHLORIDE

decrease health hazards
increase cleaning and
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*See July 1952 issue of Industrial Hygiene and Occupational Medicines

Write in for our Technical Bulletin "How To Clean Electric Motors."

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is very close. Virus is often latent in tears; trauma starts infection and then the case becomes occupational.

EKC is often carried by nurses and doctors via droppers, medication or hands. Then the case also becomes occupational. Prevention is based on:

- Rigid antiseptic routine of hands, droppers, medication for handling every eye case.
- Watchfulness of supervisors in plant. They should be on the lookout for "red eyes" which should be sent out of the plant.
- Education of employees.

Lost-time from such cases can be from one to six weeks and there can be permanent loss of visual acuity.

Industrial Health

—From page 136

cient insecticide to be lethal to tropical fish.

Continuing experience with Lindane indicates that the ban on the use of continuous vaporizing devices in homes was well taken as the concentrations produced by these devices can be above the

permissible limit for continuous exposure. There have been a number of reports of sensitivity to Lindane acquired by individuals continuously exposed to the devices. These sensitivities have usually occurred as the result of defective equipment or other types of non-conformance with the suggested regulations, including installation of the devices in homes.

The sensitivities have been most

commonly local reactions such as coughing, sneezing, headaches, dryness or burning about the eyes, pain in the throat and nostrils, nausea and other non-specific symptoms. Occasionally more severe local and systemic effects are reported. The Committee has records of three cases of anemia, a near fatal anuria, an asthma-like condition and a severe and persistent tracheitis.

As an alternative to the continu-

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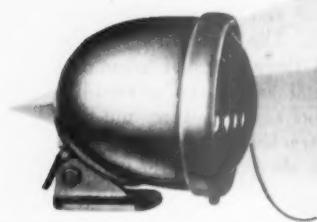
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ous vaporizer, various types of fumigating applicators have been produced. These are designed to release relatively large amounts of Lindane in temporarily unoccupied rooms for a short time. They have been accepted under Federal Law where they introduce Lindane in amounts ranging from three to four grams per 1,500 cubic feet of space not oftener than once in two weeks. It is recommended that they should be used for not more than four hours and that the premises must be aired for one-half hour before being occupied again. These devices are reasonably safe if used strictly in accordance with these directions. They should not be used in living quarters, however.

Radium Spill

Hazard Evaluation and Control After a Spill of Forty Milligrams of Radium by R. K. Skow, V. V. Vandivert and F. R. Holden. *Nucleonics* 11:45-47 (August, 1953).

THIS SPILL OCCURRED when a glass capsule containing approximately 40.3 milligrams of radium was inadvertently stepped upon in a student laboratory.

The United States Naval Radiation Defense Laboratory personnel arrived at the building 16 hours after the most probable time of the spill. They found widespread contamination of the building and of the students' hands, clothing, and personal possessions. The building was immediately sealed and left to permit concentration upon the more immediately pressing problem of location and decontamination of the radium on the bodies and personal protection of the students and instructors.

A decontamination center was put up for treating the persons, clothing and effects of the students. Upon arrival at the center, the students were monitored carefully and all contaminated areas were scrubbed with soap and water and then with citric acid. The treatment was only partially successful and further decontamination was attempted by scrubbing with a warm solution containing trisodium citrate, 4/10 per cent commercial detergent and 1/10 per cent germicide. Scrubbing with this mixture for two minutes, fol-

lowed by rinsing with warm water and repeating the treatment until no significant reduction was found in the contamination on further scrubbing reduced the contamination, usually, to levels of about 200 to 300 decompositions per minute per 85 square centimeters.

Wool clothing could be decontaminated satisfactorily only where the original levels of contamination were not high. Vacuum cleaning and dry cleaning were attempted. If the residual contamination could be reduced to 200 to 300 decompositions per minute per 85 square centimeters, the clothing was considered acceptable. Cotton clothing and other washable fabrics were generally satisfactorily decontaminated by standard laundry procedures. Shoes were scrubbed with the skin decontaminating solution. Repeated use of this solution gave satisfactory results.

Such things as floor mats, seat covers and other similar materials which had been contaminated could not be satisfactorily decon-

taminated in most instances and were discarded. Hard surfaces such as steering wheels were cleaned by repeated use of abrasive agents, detergents and vacuum cleaners.

The building was first entered three days after the contamination occurred. The survey group first entering the building wore complete protective clothing and self-contained breathing apparatus. The airborne contamination at

that time measured 1,000 decompositions per minute per cubic foot as compared to a maximum permissible concentration of 0.33 decompositions per minute per cubic foot. The airborne radon activity measured 10,000 decompositions per minute per cubic foot compared to a permissible of 630 for radon. The beta-gamma radiation combined measured 20 milli-Roentgens per hour at that time.

—Next page

Are You Fully Protecting the Feet of Your Employees?



"SANKEY" IMPROVED FOOT GUARD equipped with Anti Skid TOE CLIP.

"SANKEY" FOOT GUARDS consist essentially of a metal shield to be worn over the shoe whenever the foot is in danger of being either crushed or cut. The metal shield is designed to furnish a maximum amount of protection to the entire front of the foot—not merely the toes alone, but also to the instep against hazards from falling, rolling or flying objects, or from accidental tool blows. Write for literature or a trial pair.

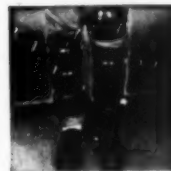
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The loose contaminant was first removed as completely as possible with a vacuum cleaner. About 35 per cent of the spilled radium was recovered this way. The concrete and wood of the building were heated with an oxy-acetylene descaling torch and then scraped and vacuum cleaned. The surfaces were then repainted and decontamination was considered complete. The radioactive waste, carpets, linoleum and cleaning rags, filling more than 200 drums, was loaded with concrete and sunk at sea in water deeper than 100 fathoms.

The building was completely decontaminated and put back into operation approximately three months after the date of the spill.

Cases for Comment

—From page 140

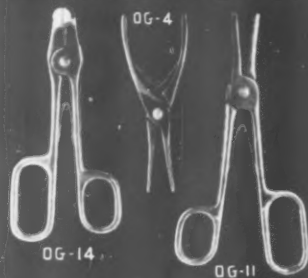
possible further developments.

In the second case, an employee was injured when a chip from a forging (20 feet distant) struck a glancing blow across his right forehead. The physician's diagnosis was, "diagonal laceration two inches long right forehead." After suturing and dressing the wound, the physician advised the patient to remain at home to watch for any residual effects. The employee lost three days (2 work days plus a Sunday). Here again, the attending physician certified the employee could have returned to work but was kept at home to watch for possible further developments.

In both of these cases, the Committee of Judges decided the injury should not be included in the company's injury rates. The Committee discussed whether or not observation at home could be considered "hospitalization for observation." Some of the members called attention to the fact paragraph 3.4.3 did not specifically state the employee had to be in a hospital for observation purposes.

The Committee came to the conclusion that after proper instruction by a doctor, it was possible for a lay person to make the proper observation during a 48-hour period in order to detect residual effects from an injury. The committee called particular atten-

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N-16 medium weight all neoprene glove, 11" length. Snug curved fingers, non-slip grip surface afford almost bare-hand dexterity.

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Here is the startling record of today's public fire losses—which cost the American taxpayer \$750,000,000 a year. Containing graphic accounts of hundreds of specific incidents, this book "contributes some fine documentation for those who want to do something about it. He gives chapter and verse on inadequate inspection, political corruption in fire departments, faulty building, obsolete equipment and public apathy . . ."

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tion to the fact the physician had made a definite statement that the injured employee could have returned to work without lost time. In the second case, since there was apparently no work for this employee on Sunday, and since the doctor had stated the employee could have returned to work on Friday, it did not appear the employee's absence from work on Sunday made any difference.

Low Voltage

—From page 123

should be applied and, of course, short circuiting of a fuse by means of a penny must be outlawed.

Low voltage extension lights should be used in wet locations such as tanks and condensers. We recommend 12-volt circuits supplied by small, dry type transformers. All portable as well as stationary tools should have their cases grounded to prevent shock to operators if a live wire within the tool should charge the entire tool. When this happens, the workman may become part of a closed electrical circuit and as a result, receive a dangerous shock. If the tool is properly grounded, the fault current will take the low resistance path to ground provided by the ground wire, by-passing the operator and causing the protective device to open the circuit.

Frequency Rates

—From page 131

hours of exposure were about the same from year to year, had the following numbers of disabling injuries during a three-year period: 14, 13 and 16. The yearly average number of injuries would be 16 (14 plus 13 plus 16, divided by 3). In the current year, suppose injuries dropped to 10. This shows that the injury experience was better than in the preceding years, but does it show that the safety program was better?

To answer this question, let us see how much injury totals could vary from year to year just due to chance alone. Using the average of 16 injuries as the probable level of this plant's safety program, a unit of variation is 4 (square root of 16) and two units of variation is 8. The range of chance varia-

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When you ask for EYEGARDS you assure your workers the very finest in eye protection and comfort—and you do it with substantial savings. EYEGARD goggles have built-in comfort because the super-light plastic "form-fits" the face . . . have greater protection because goggles are impact resisting . . . have extra ventilation through three large vents at side of cup and seven additional vents around the lenses. Cool and fog-free. Prices will surprise you . . . get the information today. Write for free catalog.

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tion, then, becomes 8 to 24 (16 minus 8, and 16 plus 8). This indicates that the total number of injuries in any one year could drop to 8 due to chance alone. The decrease to 10, then, does not provide evidence that the level of the safety program has changed.

The injuries can be changed into rates, and for the purpose of this example, suppose this plant worked about 2,000,000 hours a year. The rates for the four years then would be 7.0, 9.0, 8.0 and 5.0. The argument of this discussion is that none of these rates necessarily measures or evaluates the safety program during their respective years. They do measure the rate at which injuries occurred during those years—they do not necessarily measure the program during those years.

The question might correctly be asked, "If the rate of 5.0 does not measure the level of the safety program, then what was the level of the safety program during this year?"

The answer to that question is this: Until determined otherwise, it must be assumed that the level of the safety program is still about 8.0 (an average of 16 injuries per year with 2,000,000 man-hours worked) or possibly a little lower, if a new average is calculated including the current year's experience.

By comparing this average rate with the average of the industry in which this company is classified, it is possible to evaluate the plant's program in a general sort of way. It would be misleading, though, to evaluate the plant's program by using the rate for any particular year.

The rate for a particular year does show, though, and shows exactly, the rate at which injuries occurred during that year. When interpreted this way—as an evaluation of performance—the rate serves many useful purposes.

Establish Scholarship in Materials Handling

A \$2000 scholarship fund at Illinois Institute of Technology for students majoring in materials handling has been established by Clark Equipment Company, according to an announcement by

Dr. Ralph G. Owens, dean of engineering.

Known as the Eugene B. Clark scholarship in honor of the founder of the company, the scholarship will be awarded annually to a junior working for a degree in industrial engineering and majoring in materials handling. The grant will cover tuition costs for the student's final two years.

Recruit for a Congress

—From page 127

running down the Safety Congress. The batting average looks pretty good."

Today my request for the assignment of personnel to the Congress came back with Larson's OK, with one amendment in the form of a note, "I've got meetings in Chicago all day Monday and Thursday of the week of the Congress. Route me through the Congress Tuesday and Wednesday."

So, finally, I have a top corporation executive to come and sit and listen, to look and see, not to make a speech or catch a plaque. And I'm a little scared.

Some things are clear. I want him to hear Dr. Paul Mundie's talks on "Personal Effectiveness" at the Early Morning Class Sessions, partly for what he'll learn, but even more to show him right at the start how the delegates do come out and pack the Ballroom of the Hilton for these down-to-earth meetings. Then, I want him to see the Exhibits. For I know that Larson has only a foggy idea of the tremendous range of equipment and materials available to deal with our problems.

Then I want him to meet some of the NSC people—Ned Dearborn, Charley Alexander, and Mark, our own staff representative.

I want him to attend our intra-company meetings each day to hear the reports on the sessions various people attended.

I want to set up a dinner Tuesday night where I can expose Larson to a group of the solid old pro's of the business—the kind of safety men who are automatically members of the board of ASSE and carry the substantial committee assignments on the NSC Industrial Conference.

And we'll wind up his stay at

New DRY TAMP PERMA^{Mix} Floor Patch

Don't stop traffic to repair floors—use Permamix, the new all-temperature DRY TAMP floor patch.



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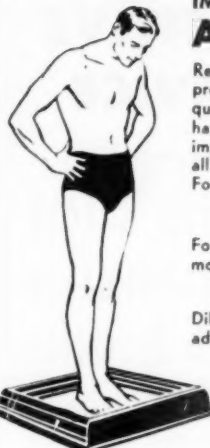
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Refinements and improvements in essential ingredients and production methods make Dolge's famed ALTA-CO more quickly soluble, more agreeable generally and better to handle. Dissolved economically in water for the all-important foot bath, ALTA-Co kills in less than a minute all different species of fungi commonly found in Athlete's Foot. Non-irritating; harmless to towels.

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For dusting feet after shower or other exposure to moisture.

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Diluted 1 to 300 in water, this powerful wash provides additional protection against Athlete's Foot on surfaces where fungi are commonly found.

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Cut Down Accidents!

New Safety Records Achieved
WITH OUR

Complete Incentive Program

Recognition must be given to all whether a member of a winning group or an accident-free worker in a losing group. This may be achieved through the use of group awards supplemented by individual safety awards.



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IN CANADA: SAFETY SUPPLY CO., TORONTO

the Congress at the Banquet Wednesday night.

All those things are clear-cut and obvious. But where I'm going to have to use my head fast and clear is in routing Larson around the actual sectional and subject sessions, placing him where the right speeches are being delivered on the right subjects to hold his interest and respect.

And may the good Lord deliver him from all windbags, from all muddy, ill-prepared papers, from all one-tracked, biased presentations!

Rehabilitation

—From page 111

such importance that in 1943 they opened their own Rehabilitation Center in Boston and one in Chicago in 1951. Since the opening of the Boston Center they have treated more than 2,000 cases with 84 per cent being significantly improved by treatment at their center and 67 per cent were effectively returned to full time work.

When severe injury strikes, damage control or control of disability comes into play. Actually the prevention of injury and the control of disability are complementary services. In spite of the vigorous safety program that has been and is being fostered by this conference, 13,481 compensable injuries were reported by the Industrial Commission of Virginia in 1952. Money was spent for a rehabilitation program in less than one in every 250 cases. It is, therefore, suspected that a considerable percentage of cases handled could have had the degree of disability significantly reduced by effective rehabilitation. When, in spite of the adequate safety program, an injury occurs two factors come into play which determine cost of the injury to the company.

First is the degree of liability and second is the degree of disability. The determination of liability, in case of injury is fairly well fixed by law and jurisprudence. However, the degree of disability is a variable factor which depends on the degree and effectiveness of the treatment secured. In those cases which receive a minor injury, many of the industries present have established ade-

quate medical facilities to meet the need.

However, when a severe disability is incurred, all too often management and physicians tend to flee from the situation, not unlike the passengers and crew from the Titanic and leave the vessel in a sinking state. Under the present setup for offering medical care and compensation in Virginia, the industrial organizations have established: first, vigorous safety programs, second, plant medical service to care for minor disablement and injury; and, third, when severe disability is sustained, acute medical and surgical services can be obtained from the community hospitals. Under the present hospital programming, the average number of days admission in the hospitals in this state ranges from eight to 15 days. It is the general tendency to discharge patients from a hospital environment when they reach a convalescent stage and as a result, the percentage disability in my estimation remains much higher than necessary. As you have seen in the case of William Simpson, rehabilitation programming to the point of work markedly reduced his degree of disability. Through this, the Appalachian Electric Power Company has a working employee who greatly appreciates the services rendered by his company and also has saved a considerable amount of money in handling the case in such a manner.

Effective control of disability in industry cannot and will not come about until such time that employers recognize the need and feasibility for pursuing such a program. As I have already indicated, there is a definite need for safety programs. During the years it has been active, it has significantly reduced loss of man hours and as a result liability insurance premiums have reduced accordingly. The counterpart of safety rehabilitation cannot be forced by insurance companies, by legislation, by interested physicians or anyone else. People concerned with business management and safety have to demand such service before it can be made wholly effective.

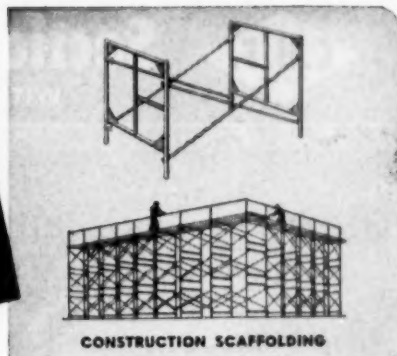
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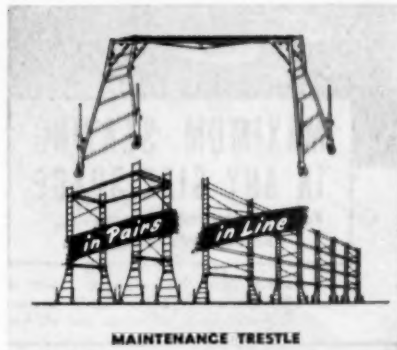


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Large Capacity for DIRT and LIQUIDS!

KENT Suction Cleaner and 27-gallon tank for extra capacity are installed on truck in a jiffy—and as easily removed—without tools of any kind! Automatic shut-off valve in cleaner operates when **BOTH** tanks are full of liquid . . . no water can enter fans or motor. Tension spring holds adjustable handle in position shown when not in use.



THE KENT SUCTION CLEANER for wet and dry pick-up is quickly available for separate use when less dirt or liquid capacity is required . . . and suction unit can be used as a blower! The priceless ingredient of quality is built in every **KENT** Machine—including the famous **KENT** Floor Machines. All are built to last!

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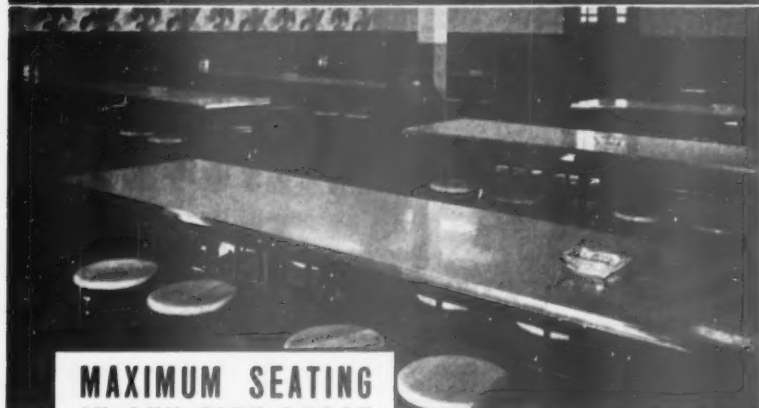
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WITH SWING SEATS



MAXIMUM SEATING IN ANY SIZE SPACE

For Recreation Rooms . . .
Factory Work Tables

Available in units to seat 4 to 24 people, "CHF" Sectional Tables may be purchased in varying lengths to meet your exact requirements. Seats swing completely under table out of the way to give you full aisle

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Safety Grip-Strut is a new basic material. All one piece, steel or aluminum, in various sizes and gauges. Sold like lumber, used like lumber and stocked in your storeroom like lumber. Ideal for on-the-job fabricating. Not welded, riveted or expanded. It presents an open space, in a diamond shaped pattern, in excess of 75% of the area for ready access of light and air and gives a positive NON-SKID footing in all directions. Ideal for stair treads, fire escapes, cable trays, work platforms, catwalks, flooring and for original equipment safety treads. Your own mechanics can install it—it's inexpensive, yet permanent and safe.

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gressive in the nation. The rehabilitation program has developed primarily to get people back to work who have been on relief or welfare status. We hope those of you who have hired disabled persons have found them to be satisfactory employees. The facilities available in this state for pursuing adequate rehabilitation are:

1. Division of Vocational Rehabilitation.
2. Woodrow Wilson Rehabilitation Center, Fishersville, Va.
3. The Baruch Center of Physical Medicine and Rehabilitation, Medical College of Virginia, in Richmond.

It is hoped that a similar facility will be developed at the University of Virginia Hospital in Charlottesville. Screening groups for outlining rehabilitation programs have been established at Richmond, Norfolk, Newport News, Roanoke, and Arlington. I am certain that these groups could be altered and expanded to meet the needs of industry in those areas if there is an expressed desire. Suffice to say that all component parts for offering effective and adequate rehabilitation to the severely disabled employed in the State of Virginia now exist.

If you, the men of industry, desire to broaden the scope of your safety program to include disability control you will find adequate services can be mobilized rapidly to meet your need.

In conclusion, I would like to ask a few questions:

1. Does your injury control program include disability control?
2. The reason you have pursued the vigorous safety program is because it creates excellent personnel relations, it saves money and it is just plain good business. Is not effective rehabilitation control programming good business too?
3. Do you have a Bill Simpson in your organization?

Safety on Display —From page 119

tection, and rubber suits to provide body protection against acids and caustics. Foul weather gear in the form of rain hats, coats, boots and overshoes are also represented.

During the explanation of specialized items the indoctrinee is informed of the high cost of protective equipment. He is instructed

that waste prevention is vitally important and that should he have occasion to use valuable safety equipment it is his responsibility to return it in good condition.

A running commentary by the lecturer, describing locations and situations where specialized equipment is used, emphasizes the value of the displayed items. To further emphasize the importance of safety equipment, some so-called "trophies" are on display. These include hard hats, safety shoes and goggles which were damaged in preventing injury to their users. An example of these "trophies" is a slightly damaged hat which was dented when struck by a bolt weighing 4¾ pounds which fell some 35 feet. The damaged hat, the bolt and a newspaper clipping from the safety section of Sun Oil Company's monthly publication, *Our Sun*, complete with pictures of the hat and the lucky wearer, tell the story.

Following the explanation of the display, the indoctrinee is urged to ask any questions pertaining to equipment, procedures, rules or regulations. He is informed that suggestions relative to safety are welcome at any time and is urged to report any hazards to his foreman. Finally, as material reminders of the display, he is issued a hard hat and a pair of plastic protective goggles. He is urged to avail himself of the privilege of buying safety shoes at cost at the refinery storehouse. An indoctrinee, wearing prescription glasses, is also informed how he may effect both economy and safety by purchasing prescription safety glasses through the Safety Engineering Office.

Finally, the indoctrinee is informed that 98 per cent of all accidents are caused by the workers themselves and despite the tremendous amount of money spent by the company each year on protective clothing and equipment, the best safety device is still the careful worker.

The Equipment Display Panel has been in existence for three years. Older employees, particularly foremen, have availed themselves of opportunities to view its many items. The reaction of both the new and the old employee is



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THE SURETY RUBBER COMPANY
CARROLLTON, OHIO Dept. 5

FABULOUS WINTER LINER BEING INTRODUCED

(PICTURE ON BACK PAGE)

CHICAGO, Sept. 20 — The Standard Safety Equipment Company today launched an intensive campaign bringing to the attention of industrial buyers their StaSafe Windsack, a low cost hard hat winter liner.

It was learned that the Windsack sells for a fraction of the cost of previously used permanent liners.

This low cost makes it possible to throw the Windsack away when it becomes dirty. In addition, its lightweight, snug-fitting qualities make the Windsack one of the most efficient and practical winter liners on the market today.



Standard Safety Equipment Company
232 West Ontario Street
Chicago 10, Illinois
Gentlemen,

Please send me more information on the StaSafe Windsack.

Name _____

Title _____

Company _____

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SINCE 1936

Against

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- ★ SKIN INFECTIONS
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PROTECTIVE SKIN CREAM

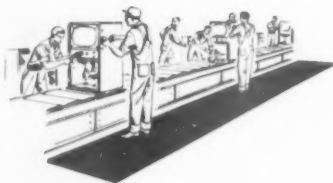
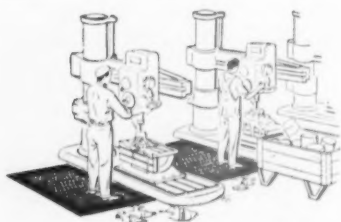
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Foot comfort and production go hand in hand for any business. When there's foot fatigue, work lags—comfortable feet mean happy, energetic workers.

That's where DURABLE mats step in. Their cushioning surface of resilient rubber gives a spring and bounce to work areas . . . Foot

fatigue is relieved and work schedules maintained with ease.

In addition, DURABLE mats prevent slip and slide accidents—cut liability risks—and trap dirt under the mat so that cleaning is easy.

DURABLE mats are a SAFE, PROFITABLE investment. There's one for every purpose.

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Dear Matty:—

Please tell us how Durable mats can improve Safety and Production.

NSN

one of high regard for the far-reaching protection provided by the company.

In conclusion, the intangible value of the Display Panel in raising employee morale, the aforementioned alleviation of fear build-up, and the improvement in employer-employee relations cannot be overestimated. However, among calculable values, a reduction in disabling injuries among new employees has been noted since the advent of the panel. Secondly, prompt reporting of minor injuries by new employees has undoubtedly prevented many more serious cases. Finally, the number of occasions that field safety men are contacted by new employees to discuss safety problems and equipment is gratifying proof that the Safety Equipment Panel, supplementing the indoctrination lecture, has penetrated deeply into the new employee's consciousness.

Green Cross News

—From page 146

years while serving as manager of the Commercial Department of the Kansas City Public Service Company. He was well known in advertising, newspaper and publication circles, having served as president of the Advertising and Sales Executive Club of Kansas City and president of the Kansas City Industrial Editors Association. He is also a past president of the Kansas City Kiwanis Club and was prominently identified for many years with the United Community Funds and Red Cross campaign. He was also secretary of the Midwest Transit Association, an organization that covers 11 mid-western states. Mr. Wood resigned from his many Kansas City activities about six months ago and moved to California to enjoy a well earned rest. He found it difficult to pull clear away from safety and when the San Jose position was offered, he accepted. He and Mrs. Wood have been living in Laguna Beach near Los Angeles.

"Mr. Peepers" Peeps at Safety

The Allis-Chalmers Company has given wide distribution to a poster on vacation safety and lined up Wally Cox, star of Reynolds Metal

TV show, to be the "mouthpiece." "Follow these Rules for Safe Summer-time Fun," reads the caption and then follow specific suggestions aimed at youngsters on vacation, for bicycle safety, swimming, playground safety and last but not least, safe walking and safe crossing of streets. The pedestrian rules were worked out jointly by the Milwaukee Safety Commission and the Police Department. The illustration shows "Mr. Peepers" in characteristic pose before a class of school children, putting the finishing touches to a blackboard message reading: "Have a Happy Summer—but let's play safe so we'll all be back next Fall!" (signed) "Mr. Peepers."

Marine Group Joins Council

Members of the Pacific Northwest Marine Safety Council were given a sincere "Welcome Aboard" by Louis W. Hashman, executive board chairman of the Washington State Safety Council at a meeting in Seattle on July 20. The Marine group is now formally affiliated with the State Safety Council and will integrate their activities into those of the State organization. The Marine Council is currently active in reducing sport fishing accidents through an educational program pointing out the use of proper and safe boats and equipment in the sport fishing areas along Washington's coastal waters.

Tragedy Strikes Home

On July 31 Mr. and Mrs. Everett Waters were standing on the curb waiting for the light to change so they could cross a busy street in their home city of Sacramento. Two cars suddenly collided at the crossing. One driver lost control of his auto and it crashed over onto the sidewalk, pinning Waters and his wife against a brick wall. The husband was killed instantly; Mrs. Waters was injured seriously and was kept in the hospital for three weeks. The victims were the daughter and son-in-law of Frank Enos, manager of the Sacramento Safety Council.

Stet Urges Space for Safety

Stet, the house magazine for house magazine editors, published monthly by the Champion Paper and Fibre Company of Hamilton,

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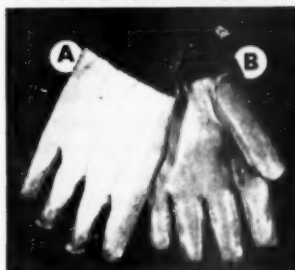
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NEW *Ladscaf* LIGHTWEIGHT SCAFFOLDING with Fast-Acting 'Lock-On' Clamps—Now Available
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"JOB-DESIGNED" TO INSURE SAFETY AT YOUR FINGERTIPS

MEN'S PALM-DIP SAFTICUFF. Dip-coated on palm and fingertips with vinyl plastic. Open safety-cuff for better air circulation... easier removal in emergencies. Gloves "breathe" through uncoated back... offers more circulation for hands.

WOMEN'S PALM-DIP SAFTICUFF features light weight, flexibility and form-fit. Ideal for assemblers, inspectors, sorters, checkers and counters. Recommended for any operation or process requiring handling of small parts.

MEN'S FULL-DIP KNIT WRIST PLASTIGLOV. All purpose glove high in tensile strength, wear and tear resistance surpassing any rubber coated or leather glove. Water, heat and corrosion resistant. Cotton fabric with comfortable soft fleece lining. Jumbo size features extra long curved fingers and thumbs.

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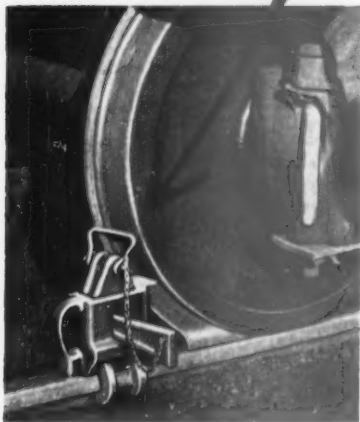


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in immovable position with
the M & M RAIL CLAMP—it
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The M & M RAIL CLAMP is simple to use, saves time in positioning. No blocks, ties or shims are used. It's a complete unit, wedge is attached to clamp with strong steel chain.

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COMPANY**

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Ohio, recently featured a four-page lead article captioned "Accidents Don't Happen." The interesting story is designed to show editors of plant publications how to sell safety effectively in their columns, through modern approaches, such as cartoons, characterizations, dramatic touches, teasers, puzzles, riddles, quizzes, safety serials, shock stories, timely tie-ins, human interest features, etc. The article is well illustrated with sample cartoons and puzzle pictures. It is a convincing presentation that should have strong appeal to plant publication editors. *Stet* has made a valuable contribution to the safety cause.

Governor Presents Awards

The annual Award Presentation Dinner of the Minnesota Safety Council was held recently at Hotel St. Paul. Approximately 175 industrial and mercantile companies won the Governor's Industrial Safety Award for 1952. A. V. Rohweder, president of the Council, was general chairman. The presentation of awards was made by Honorable C. Elmer Anderson, Governor of Minnesota, who also made the address of the evening. In addition to the industrial awards, plaques were also given for the State Department award, the Boy Scout award, 4-H Club awards and a Farm Safety plaque. Bronze plaques also were given to four cities and six counties for outstanding safety progress during 1952. Seven counties also won blue ribbon honors for adult farm safety work.

"These Jobs Must Be Done"

A striking mailing piece is being used successfully by the Seattle-King County Safety Council as a straight-from-the-shoulder appeal for funds for an expanded program of activities with special emphasis on traffic safety needs. It is captioned "These Jobs Must Be Done" and lists the need for improved engineering facilities, stronger enforcement, driver training clinics and expanded programs for schools and homes. It is an attractive six-page folder with good art work and convincing copy, the work of managing director Paul W. Seibert and his Public Information Committee.

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GREATER SAFETY
for all
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Better protection for all the hair all the time because the full, wide, snood-type back of the Kennedy "Victory" Cap permits complete coverage. Easy to put on. Adjustable to all head sizes. 11 styles to choose from.

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Skilled hands are a valuable asset to management, as well as an important responsibility of it. Mione Hand Cleaners can insure that asset by helping to share the responsibility for keeping skilled hands in prime working condition.

WORKERS like the quick-lathering, gentle-scrubbing, easy-rinsing action of Mione. And its very definite skin conditioning value.

MANAGEMENT likes the safe, sanitary, efficient, trouble-free Mione features, plus its economy per pound, low cost per scrub-up, and the basic economy of skilled hands always at top productivity.

YOUR SUPPLIER of washroom needs can give you full particulars about Mione so that you, too, can benefit from the know-how gained from 40 years of making nothing but better and better soap for the hands.

WRITE US FOR THE NAME OF THE
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Safety Library

—From page 154

nity. By Huntington Williams. *American Journal of Public Health*. August, 1953, p. 974.

Occupational Health Program in a State Health Department. By Stanley H. Osborn and J. Howard Johnston. *American Journal of Public Health*. August, 1953, p. 968.

New Approaches to the Health Hazard Evaluation of Pesticides. By Kingsley Kay. *AMA Archives of Industrial Hygiene and Occupational Medicine*. July, 1953, p. 70.

Nickel Poisoning. By John F. Kincaid and others. *AMA archives of Industrial Hygiene and Occupational Medicine*. July, 1953, p. 48.

Salt in Heat Sickness. By D. John Lauer. *American Journal of Nursing*. August, 1953, p. 933.

Mines

A Good Mine is a Safe Mine.

Mechanization. July, 1953, p. 84.

The Technique for Sounding Roof. By W. J. Egan. *Coal Age*. August, 1953, p. 104.

Natural Gas Industry

The Fire and Explosion Hazards of Gaseous Fuels. By Allen J. Johnson. *Fire Engineering*. August, 1953, p. 639.

Noise

Noise and Audiometric Histories Resulting from Cotton Textile Operations. By Jerome R. Cox and others. *AMA Archives of Industrial Hygiene and Occupational Medicine*. July, 1953, p. 36.

Noise as a Factor in Health. By Alvin F. Meyer and others. *American Journal of Public Health*. August, 1953, p. 998.

Organization

Otis' Plants Are Tops in Safety. By W. J. Niederauer. *The Plant*. p. 50.

Power Presses

Safety Features of Hydraulic Control Circuits. By H. L. Stewart. *Plant Engineering*. August, 1953, p. 93.

Printing Industry

Skin Diseases in The Graphic Arts Industry. By W. Schweisheimer. *Printing Equipment*. August, 1953, p. 33.

Psychology

The Psychology of Industrial

SAFETY STARTS UNDER-FOOT!



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SAFETY FEATURES:

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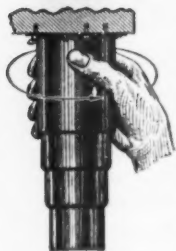
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Effectively guard against injury to operator, die and press on operations where bushings leave the guide pins. Protect pins and bushings from chips and dirt when entire pin and bushing are covered. Inexpensive, easy to attach.

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Accidents. By Gerhard K. Cotts. *Pulp and Paper Magazine of Canada*, August, 1953, p. 192.

Worker Psychology—A Formula That Works. By Daniel Koakauer. *Factory Management and Maintenance*, August, 1953, p. 218.

Publicity

The Role of Publicity in Fertilizer Plant Safety. By Lawrence A. Long. *Agricultural Chemicals*, July, 1953, p. 51.

Saws

Circular-Saw Accidents. Safety Standards. August, 1953, p. 6.

Waste Disposal

Trickling Filter Sewage Plant Built to Remove Radioactive Wastes. By A. L. Biladeau. *Civil Engineering*, August, 1953, p. 58.

Welding

Respiratory Disorders Among Welders. By Robert Charr. *Journal of the American Medical Association*, August 15, 1953, p. 1520.

Workmen's Compensation

Accident Prevention Reduces Workmen's Compensation Costs. *New York State Industrial Bulletin*, August, 1953, p. 15.

Workmen's Compensation in the United States. IV—Occupational Disease. *Monthly Labor Review*, July, 1953, p. 709.

X-Rays

Radiation Hazards. By Lee B. Fosdick. *Nursing Outlook*, July, 1953, p. 390.

Distinguished Service

—From page 142

Forstmann Woolen Co., Passaic, N. J., Finishing Mill.

General Electric Co., Laminated Plastics, Coshocton, Ohio.

Lehigh Portland Cement Co., Union Bridge (Md.) Unit

Penn-Dixie Cement Corp., Plant No. 2, Clinchfield, Ga.

Remington Arms Co., Inc., Lake City Works.

Shell Pipeline Corp., Houston, Tex., Oil Pipeline Dept.

Standard Oil Company of California, Richmond Refinery.

Western Electric Co., Inc., North Carolina Works, Burlington Plant.

AWARDS OF MERIT

Alpha Portland Cement Co., Maunheim, W. Va. Plant.

Aluminum Company of America, Smelting Division, Vancouver, Wash.

A. S. Schulman Electric Co., Atomic Energy Plant, Paducah, Ky.

Associated Universities, Inc., Brookhaven National Laboratory, Upton, Long Island, N. Y.

Atchison, Topeka & Santa Fe Railway System, San Bernardino Shops

Atlantic Coast Line System, Louisville and Nashville Unit.

Bethlehem Steel Corp., Bethlehem Quarry.

—Eastern Erection Districts.

—Leetsdale Works.

—Marion Division.

—Seattle Plant.

—Tulsa Plant.

—Quincy Yard.

Chesapeake & Ohio Railway, Richmond, Va., (Entire company.)

Chicago & Eastern Illinois Railroad, Maintenance of Way and Structures Depts.

Cit-Con Oil Corp., Lake Charles, La., Refining Dept.

Duluth, Missabe & Iron Range Railway, Duluth, Minn., (Entire company.)

E. C. Machin, Inc., Allentown, Pa., Heavy Construction Unit.

Erie System, Cleveland, Ohio, (Entire company.)

F. H. McGraw & Co., AEC Project, Paducah, Ky.

Illinois Central, Chicago, Ill., (Entire company.)

Missouri-Kansas-Texas Lines, Dallas, Tex., (Entire company.)

—Communication Dept.

Monsanto Chemical Co., Monsanto,



DUST COLLECTORS give you more positive industrial dust control!

The AEROTEC INTEGRAL is a highly efficient mechanical collector developed to give you the most effective industrial dust control! In many applications the high efficiency of the AEROTEC INTEGRAL permits the return of cleaned air to the room, appreciably reducing heat loss.

Only AEROTEC offers you high collecting efficiency over a wide range . . . constant pressure drop . . . no fire hazard since all materials used in construction are non-combustible . . . long life . . . self-cleaning collecting elements . . . easy maintenance—only periodic removal of dust from hopper or bin.

Why not let one of our representatives help you solve your dust-collection problems? Call or write him today!

Project Engineers

THE THERMIX CORPORATION

Greenwich, Conn.

(Offices in 38 Principal Cities)

Manufacturers

THE AEROTEC CORPORATION

Greenwich, Conn.



ACME...the only Gas Mask with the "PICTURE WINDOWS"

You never have that "jammed-in" feeling, wearing the Acme Full-Vision Gas Mask. Its patented, larger lenses are like picture windows, giving you full natural vision for that safe, unconfined feeling. When you walk, you can actually see your toes without bobbing your head. This factor alone makes Acme outstanding among gas masks... well worth looking into.

Write for the complete story on Acme Gas Masks for all occupational hazards.

ACME PROTECTION EQUIPMENT COMPANY

3037 West Lake Street, Chicago 12, Illinois



"Safe-T" Hat

Fabric designed especially for us. Flame resistant; light and airy; allows scalp to breathe. Brass buckle for ornamentation. Top has snaps so it can be worn either open or closed. A real safety hat with smartness. In navy blue and other colors.

Write for Free Sample
or Order Direct from us.

\$8.00 dz.

CHIC MAID HAT MFG. CO., Inc.

630 HIGH STREET
BUFFALO 11, N. Y.

Ill., Wm. G. Krumrich Plant.
—John F. Queeny Plant.
—Newport, England Subsidiary.
National Portland Cement Co., Bethlehem, Pa. Unit.
New York Central System, Michigan Central Unit.
Norfolk & Western Railway, Roanoke, Va., (Entire company.)
Southern Natural Gas Co., Birmingham, Ala., (Entire company.)
Southern Pacific System, St. Louis Southwestern System.
Texas & New Orleans Railway, Houston, Tex., (Entire company.)
Union Oil Company of California, Research Center.
Union Pacific Railway, Omaha, Neb., (Entire company.)
Universal Atlas Cement Co., Buffington Plant, Gary, Ind.
—Hannibal (Mo.) Plant.
—Northampton (Pa.) Plant.
United States Government Printing Office, Wash., D. C.
Walter Kidde & Co., Inc., Belleville, N. J., (Entire company.)
Western Electric Co., Inc., Brooklyn, N. Y. Distributing House.
W. S. Bellows Construction Co., Houston, Tex., (Entire company.)

CERTIFICATES OF COMMENDATION

Colonial Airlines, Inc., Flushing, N. Y., General Office & Traffic.
Monsanto Canada Ltd., Montreal Unit.
National Gypsum Co., National City (Mich.) Quarry.
Universal Atlas Cement Co., Independence (Kans.) Plant.

Calendar Contest Winners for August

First prize in the National Safety Council's Safety Calendar Contest goes this month to A. Clark, machine shop, St. Henry Works, The Steel Company of Canada, Ltd., Hamilton, Ontario. The theme in this contest was a little leak will sink a great ship. Mr. Clark's line was adjudged the best of all those submitted. It was:

And did in row upon row upon Roe.

Second prize went to Hannah L. Miller, (Individual Member), Sarasota, Fla., for this line:

The breedin' they're speedin' spells woe.

Third prize was awarded to Florence Sutter, International Harvester Co., Milwaukee, Wis., for the following line:

"At the scene of the grime" they lay low!

The limerick for the August contest was:

*On a happy vacation Pat Roe
Cut his finger and said, "Let it go."*

But in that little scratch

Germs were waiting to hatch

Thirty \$5 awards were issued to:
Francis C. Long, College Park, Md., (Individual Member)

—Next page

UP!

UP!

UP!

TO ANY DESIRED
HEIGHT

**EASILY ...
SAFELY ...
ECONOMICALLY**

HI-LIFT

**EXTENSION
SCAFFOLD**

Models extend from 6 ft. 10 in. (can be made lower) to any desired height. Hand or electrically operated. Comes to you ready for work — no erection required, no loose parts. Built to meet individual requirements. Ideal for painting, lighting, cleaning, and all overhead maintenance. Pays for itself in time and labor saving.

Also Makers of
**HI-LIFT PORTABLE WORK
PLATFORM
and
ATLAS PORTABLE LOADING
PLATFORM**

**Write for
Complete Information**

ATLAS

INDUSTRIAL CORP.
866 39th Street
Brooklyn 32, N. Y.

WORLD'S LARGEST STOCK OF SAFETY BADGES



1933 SERIES . . . 1 1/2" dia. hard glazed enamel, heavily gold plated. Pin and safety lock catch. \$10.50 doz. (plus Fed. Tax.)



**SAFE DRIVER AWARDS
NO ACCIDENT PINS
SERVICE EMBLEMS
PLAQUES — TROPHIES**

Write for **FREE 32 Page Catalog**

**CLARENCE WILLIAMS
WILLIAMS JEWELRY & MFG. CO**
Silversmiths Bldg. 10 S. Wabash Ave.
Phone: CEntral 6-5018 Chicago 3, Ill.



**MAGNETIC SWEEPER
PREVENTS FALLS BY CLEANING
METAL OFF FLOORS**

Free 10-Day Trial Offer

Falls account for nearly 18% of all industrial injuries! They cost heavily in money and time.

An Eriez Magnetic Sweeper cleans floors, driveways, docks, etc., of fall-causing ferrous bits easily and economically.

Unloading of collected metal is simple. Just push a wiper ring from one end of the magnetic tube to the other and the load is automatically released.

Eriez Magnetic Sweepers cost as little as \$32 and can be had for 10-day free trial.



Send for **FREE Bulletin**
which gives sizes,
prices, etc.

Manufacturing Co.

27 Magnet Drive, Erie, Pa.

Matt F. Morse, St. Louis Safety Council, St. Louis, Mo.

Alexander Campbell, foreman, Chevrolet Gear & Axle, Detroit, Mich.

Mrs. Faith Elder, Niantic, Ill. (Individual Member)

Mrs. Edith E. Morgan, Blairstown, N. J. (Individual Member)

Mrs. C. H. Bowlen, Haverhill, Mass. (Individual Member)

Mrs. Eleanor M. Kizer, Ball-Band Plant, Mishawaka, Ind.

Raymond H. Welsh, clerk, Pittsburgh & Conneaut Dock Co., Conneaut, Ohio.

Mrs. Ruth Zimmerman, Aluminum Company of America, Cressona, Pa.

Mrs. Ned Fish, University of Missouri, Columbia, Mo.

Mrs. Mildred S. George, Allison Div., General Motors Corp., Indianapolis, Ind.

Mrs. B. G. Boddard, B. F. Goodrich Co., Kansas City, Mo.

Vern Lindquist, safety inspector, Hughes Aircraft Co., Tucson, Ariz.

Mrs. Jack De Leury, Bendix Products Div., South Bend, Ind.

Betsy J. Reinholt, Atlantic Refining Co., Philadelphia, Pa.

C. Jane Ruhl, stenographer, Ewing-Von Allmen Dairy Co., Louisville, Ky.

Rose Van L. Burnham, Willsboro, N. Y. (Individual Member)

Mrs. Roy W. Lowrie, Atlantic Refining Co., Philadelphia, Pa.

John E. Kleinhenz, publicity director, Indianapolis Water Co., Indianapolis, Ind.

E. H. Horeis, Omaha Chapter, National Safety Council, Omaha, Neb.

Max Levin, postal clerk, U. S. Post Office, Milwaukee, Wis.

Susie Mae Smith, City Board of Education, Tuscaloosa, Ala.

Mrs. H. W. Guenther, Tahlequah, Okla. (Individual Member)

Mrs. Charles H. Stone, Macon, Ga. (Individual Member)

Mrs. W. N. Sanders, Tennessee Coal & Iron Div., U. S. Steel Corp., Fairfield, Ala.

Arthur V. Long, Tulsa, Okla. (Individual Member)

Mrs. Bascom S. Deaver, Macon, Ga. (Individual Member)

Earle F. Baker, Sheet Fabricating Dept., Continental Steel Corp., Kokomo, Ind.

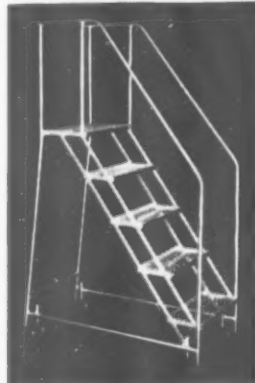
W. J. Salisbury, mine survey helper, Noranda Mines, Ltd., Noranda, Quebec, Lawrence J. Reinhard, Alpha Portland Cement Co., La Salle, Ill.

Waiter: "Yes sir, we're up to date here. Everything's cocked by electricity."

Diner: "Well, would you mind giving this steak another shock?"

The trouble with many a household budget is that there's too much month left at the end of the money.

COTTERMAN WELDED STEEL SAFETY LADDERS For Filling Rooms—Stock Rooms—Vaults



SAFE
•
STRONG
•
EASY TO MOVE
•
EASY TO CLIMB
•
NON-SKID STEPS

45"—3 Step

New improved design now being made from 1" diam. round furniture tubing.

Mounted on Swivel Brake Casters which allow the ladder to be rolled freely when no one is on it. When you step on the ladder the rubber cushioned legs rest on the floor and prevent rolling.

Made in 7 heights:—18" 2 Steps, 27" 3 Step, 36" 4 Step, 45" 5 Step, 54" 6 Step, 63" 7 Step, 72" 8 Step.

All are made in either 20" or 26" width. Send for Circular No. 52-N and prices on these ladders and our full line of Wood Rolling Ladders.

Manufactured by

I. D. COTTERMAN

4535 N. Ravenswood Ave. Chicago 40, Ill.

It's New!

HALCO PRESSURE BANDAGE



Recommended for:

- Large Wounds Dressing
- Control of Hemorrhaging
- Pressure Dressing for Burns
- Immobilization of Injured Areas

Descriptive folders and further information sent upon request.

A. E. HALPERIN CO., INC.

75 Northampton St.
BOSTON 18, MASS.

New safety equipment for industry

Further information on these new products and equipment may be obtained by writing direct to the manufacturer or to National Safety News. Accompanying coupon is for your convenience.



Extinguisher Labeling

Pictorial operating instruction labels, portraying clearly what to do and how to do it, will replace the hard-to-read small type ordinarily used for recharging instructions on Foamite and soda-acid 2½ gallon fire extinguishers of American-La-France-Foamite Corporation. Recharging instructions are now printed on the recharge container.

The new labels are fused into the metal of the extinguisher and become an integral



part of the shell. They cannot be removed. The manufacturer states that anyone can easily operate the extinguisher correctly by observing at a glance the four action pictures which demonstrate the sequence of steps to be followed. The extinguishers on which this new label appears have been inspected and listed by Underwriters' Laboratories and free literature is available from:

American-LaFrance-Foamite Corp., Elmira, N. Y.

Item No. 1.

Soap Dispenser

A new, all-metal dispenser with simple mechanism has been devised for dispensing liquid soap in lather form. The exterior is polished stainless steel and chrome-plated brass. There is only one spring in the dispensing mechanism and the soap channel contains no small openings to clog if the soap should dry out from periods of disuse or if foreign matter accidentally gets

into the dispenser.

The interior is transparent shatterproof Lustrex for safety. For ease of visibility a "look-slot" on either side of the dispenser reveals at a glance the exact level of the soap inside. A concealed, separately mounted wall plate, installed with 3 or 4 screws, firmly supports the dispenser. For further details write:

Bobrick, 1214 Nostrand Ave., Brooklyn 25, N. Y.

Item No. 2.

Protection Against Radiation

The Archer Gown, developed by Dr. V. M. Archer and associates of the University of Virginia Hospital, is made of spun lead glass, and is designed to protect vulnerable parts of the body from x-rays and beta radiation.

Aside from its main function of protection, the gown offers other advantages. It



is effective in light weights; is flexible and strong. It is chemically resistant, non-de-

teriorating in storage; is non-shrinking, non-allergic and fireproof.

Complete technical information, test reports, charts on ray transmission are available by writing:

Bar-Ray Products, Inc., 209 25th St., Brooklyn 32, N. Y.

Item No. 3.

Foam Rubber Padding

Brafoam, foam rubber molded to cloth for extra strength, is a fabric that is readily adaptable for many industrial uses. It is "aired" for better cushioning and allows air to flow through more freely.

Because of its resiliency it acts as a shock absorber and is skid-resisting because the rubber holds firm. It is easily shaped and holds its shape indefinitely.

Brafoam is permanently bonded to the cloth by the "poured-on" process and is washable. It is available in 1/16" to 2/8" thickness with many types of backing fabric. Manufacturer will send full details upon request.

Rubber Fabrics Co., 261 Fourth Ave., New York.

Item No. 4.

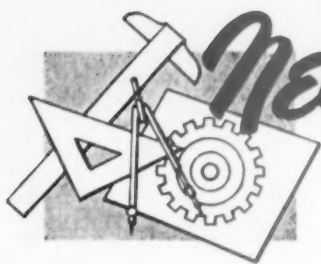
Power Sweeper

A new power sweeper that reportedly sweeps over 100,000 square feet per hour in open areas and can be dumped by one man in about 30 seconds is now available. Operated by one man, the machine covers a 36-inch path; picks up dirt, litter and



dust at speeds up to 6 mph. A rotary 21-inch side-brush increases path width to 48 inches and allows cleaning flush with walls, curbs or fences.

A special feature is fast mechanical dumping. With a few turns of a ratchet-type lever, one man can tilt the fully loaded dirt hopper and dump loads weighing up to 700 lbs. Sweeping with this machine is said to be practically dust-free. A high-speed 36-inch brush, rotating inside a vacuumized compartment, hurls heavy



New safety equipment for industry

Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.

debris and dirt into a 9 cubic foot hopper. At the same time a high volume fan draws lighter dirt and dust into a large fabric bag. The brush compartment has a heavy, flexible rubber skirt so dust cannot escape.

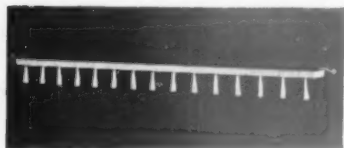
Additional information will be sent on request to:

G. H. Tennant Co., 2566 N. Second St., Minneapolis 11, Minn.

Item No. 5.

Electrostatic Neutralizer

The new "Magic Wand" neutralizer is particularly effective in reducing hazards from static electricity in manufacturing and processing where moving stock becomes highly electrified by passing over or through systems of rolls. Examples, calendering of rubber plystock, plastic films,



and high quality paper. Also spreading or coating of rubber or plastic compounds onto textiles, paper, or leather. The neutralizer is installed across the width of the stock. Write the manufacturer for Bulletin No. 125 for full details.

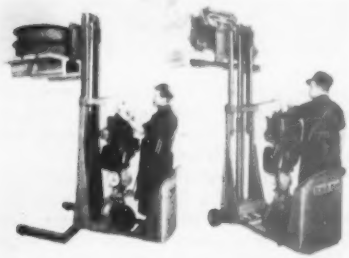
Herman H. Sticht Co., Inc., 27 Park Place, New York 7.

Item No. 6.

High Lift Trucks

Two new high-lift trucks designed to solve the problem of low load limits on elevator floors are announced by Truck-Man Division.

Model D-15 is a counterweighted high



lift having a capacity of 1500 pounds with the truck itself weighing only 1700 pounds.

The standard model has an 84-inch lift. Model DS-20 is similar to the other model but balance is maintained by stabilizing outriggers which project forward on each side of the load. Because of the difference in achieving balance, the weight of this model is only 1300 lbs. versus a load capacity of 2000.

Ample power is provided on either truck by an air-cooled engine which will operate a full 8-hour shift on a single gallon of gasoline under normal conditions. Full details on these two models are available on request by writing:

Truck-Man Division, 626 Liberty St., Jackson, Mich.

Item No. 7.

Oil-Resistant Flooring

Known as Sylox, the product is a type of oxychloride cement that is highly resistant to absorption of oil, grease, fats and solvents of any kind. It is a complete flooring "unit" in itself and no outside ingredients need be added. The unit is proportioned and packaged at the factory and is designed to cover a pre-determined area at an average depth of only one-half inch.

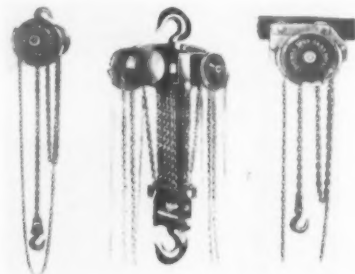
Machine shops, spray booths, kitchens, bakeries and similar areas are all of the type floors suitable for renewing with this material. The product may be applied directly over old surfaces of concrete or wood and is available in several colors. Full information will be sent upon request to:

United Laboratories, Inc., 16801 Euclid Ave., Cleveland 12, Ohio.

Item No. 8.

Hoist Unit

A total of 55 different models and sizes of spur gear hoists have been added to the Coffing line. Included among new units



are 15 sizes of single- and multiple-chain hoists with capacities from $\frac{1}{4}$ to 25 tons. For specialized applications, there are now plain and geared army type hoists, $\frac{1}{4}$ to

10 tons, low headroom hoists, $\frac{1}{2}$ to 24 tons, Clevis connected hoists, $\frac{1}{4}$ to 10 tons and extended hand wheel hoists from $\frac{1}{4}$ to 3 tons. Further information on the complete line of these hoists is available from: Coffing Hoist Co., Danville, Ill.

Item No. 9.

Parts Cleaner

A new multi-purpose parts cleaner known as the Super Cleanmaster, Model 50, cleans parts through three methods. First, with a pump driven continuously filtered flow of cleaning fluid through a semi-rigid hose; second, through a large air-agitated soaking tank which accommodates two large parts baskets, and third, with a jet air gun that also speeds drying parts.

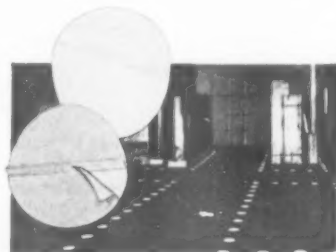
The unit provides comfortable working height for loading and unloading. Every cleaning convenience is handy, air agitated tank, continuous flow "stay-put" hose, stiff brush and efficient jet air gun. For full details write:

Practical Products Co., 2632 Nicollet Ave., Minneapolis 8, Minn.

Item No. 10.

Adhesive Aisle Markers

Brady aisle markers are made of durable, colorful plastic, backed with a heavy-duty, pressure-sensitive adhesive. They are



stocked in four bright colors—caution yellow, fire red, safety green and neutral white. They stick fast to any clean, dry floor without moistening.

The markers are only .005-inch thick, they lie flush with the floor and the plastic surface is highly resistant to abrasion. Acids, oil, grease, salts and water and most common solvents have no effect on the markers according to the manufacturer. They are recommended for use in industrial plants, offices, warehouses, parking areas, stores and airport runways. Write the manufacturer for complete information: W. H. Brady Co., 727 Glendale Ave., Milwaukee, Wis.

Item No. 11.

New safety equipment for industry

Further information on these new products and equipment may be obtained by writing direct to the manufacturer or to National Safety News. Accompanying coupon is for your convenience.



Glass-Cleaning Cloth

Seecloth is a chemically treated cloth for simultaneously cleaning and mistproofing goggles, glasses, masks, windows, windshields of auto trucks, planes and locomotives. Merely wiping the glass or transparent plastic with Seecloth is claimed to not only clean, but also to mistproof it for a period of a few hours to two weeks, depending on atmospheric conditions. The cloth can be used over and over. It is packaged in 8"x9" pieces for goggles and larger pieces for windshield use. Special sizes can be cut to order. Write the manufacturer for literature and sample strip: Hygiene Research, Inc., 684 Broadway, New York.

Item No. 12.

Vapor Degreaser

A new unitized method of vapor degreasing for cleaning industrial parts and materials known as The Baronet represents the latest methods of vapor degreasing. Rapid parts cleaning is accomplished automatically in pure, non-flammable trichloroethylene vapors. Oily and greasy parts are simply lowered into the vapor zone of this



barrel-type degreasing unit and deep and thorough cleaning is effected rapidly. Uncontaminated vapors quickly penetrate crevices, leaving the parts clean, warm, dry and ready for further processing. Compact in design, the portable unit operates with the same effectiveness as larger type industrial degreasers. It requires smaller operational space and can be conveniently installed in each work area. Single units can be easily moved from job to job within an operating section or shop. Special air-cooled condensers eliminate water connections, allowing use of the degreasing units wherever electric power is available. The unit requires only five gallons of cleaning

solvent for effective operation. Further information and literature is available from: Baron Industries, 241 West Avenue 26, Los Angeles 31.

Item No. 13.

Work Glove

A new line of "Plastic-Dot" work gloves in all popular industrial styles is now available. Included is a reversible "Plastic-Dot," made so that each glove will fit either



the right or the left hand. When the gloves finally become worn on one side through usage, they are simply shifted from one hand to the other, and a new work surface is provided.

In addition, companies whose operations require only right or left gloves can obtain them by simply ordering a quantity of reversibles, then turning a single pair into two rights or two lefts. All gloves in the new line are permanently imbedded with tiny plastic dots that protect the glove fabric from wear and tear without affecting their flexibility and working comfort. Write the manufacturer for complete details: Riegel Textile Corp., 260 Madison Ave., New York 16.

Item No. 14.

Hand Dryer

An improved fan of the National electric hand dryer prevents accumulation of

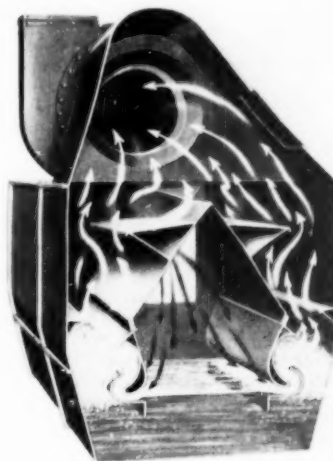


dust or lint and is virtually self-cleaning. The new fan is a double squirrel cage type, but a new design in the mounting of blades to the fan chassis and wider openings between blades prevents dust from clinging to the blades. While the new fan was developed specifically to reduce the amount of cleaning required for National dryers, it has also increased the amount of air discharged and operates with less noise than the fan formerly used. The dryer is actuated by a push button and cuts off automatically after 30 seconds. It is approved by Underwriters' Laboratories. Write the manufacturer for full details: National Dryer Corp., 616 W. Adams St., Chicago.

Item No. 15.

Dust Collector

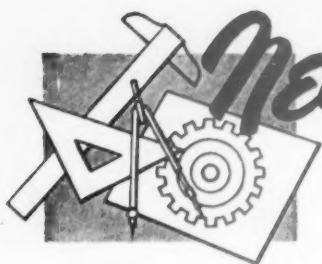
The American Air Filter Co., Inc. has announced its Design 4, Type N Roto-Clone dust collector, an improved hydrostatic precipitator that separates the dust



from the air by means of an S-shaped water curtain. This unusual and distinctive water curtain has proved highly effective in collecting most types of process dust. It is available in three basic arrangements which are identical in operating principle, but differ in hopper design and means of sludge removal. The three arrangements provide manual cleanout, continuous drain and sludge ejection by flight conveyors.

Bulletin 277 will be sent free upon request to: American Air Filter Co., Inc., Louisville 8, Ky.

Item No. 16.



New safety equipment for industry

Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.

Welders' and Chippers' Goggles

A new line of cup-type goggles has been introduced under the trade name "Saf-I" which includes a new chippers' goggle and 2 new types of welders' goggles. Features



of these goggles, as claimed by the manufacturer, are good ventilation, light weight and comfort without sacrificing strength and durability. The chippers' goggle comes equipped with new plastic lenses which have extra scratch resistance and strength. Complete details are available from the manufacturer:

United States Safety Service Co., 1215 McGee, Kansas City 6, Mo.

Item No. 17.

Dry Type Transformer

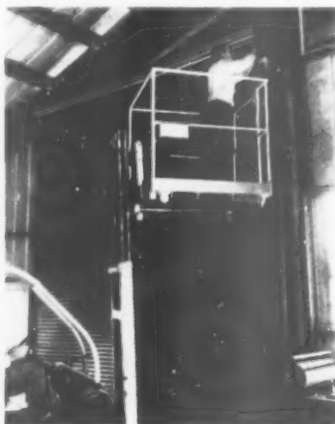
Because of the many new developments and improvements made in heat resistant electrical insulations, Hindle Transformer Co. now offer a complete new group of dry type transformers. These transformers are recommended for use to step down power line voltage for operating electrical equipment; to insulate or isolate lighting and other circuits from power circuits; for boosting low line voltage or lowering high line voltage; distributing power from 600, 480 or 240 volt lines and to furnish the proper voltage of low voltage lines. Write the manufacturer for Catalog No. 353.

Hindle Transformer Co., Inc., Flemington, N. J.

Item No. 18.

Work Platform

Something new in the industrial field is the mobile Heco safety work platform. Used in conjunction with a fork lift truck, this new unit provides immediate and easy



work access at any fork lift elevation. There is no set-up or erection necessary. Ideal for construction work, industrial plants, machinery repair, shop maintenance and many other jobs.

Built according to standard State safety regulations, this platform has four-way fork entry, is 42" wide x 42" long x 42" high with a hinged gate at one side and has a chest-level safety railing all around. The floor is faced with a 4" toe plate and the entire unit is mounted on 3" rubber casters for easy rolling when not in use. For further information write:

Hammerslag Equipment Co., 45 Elmira St., San Francisco, Calif.

Item No. 19.

Hot Materials Mitt

A new, improved mitt for safely handling extremely hot materials, called Kool-Mitt, is made of three layers of materials. Asbestos protects leather from shrinking



and gives fireproof protection; leather gives the mitten long life and maximum protection against sharp and abrasive surfaces and wool provides maximum insulation. The mitt is stitched with steel staples for long life. Back of mitt is open for ventilation, and it is so designed that it can be flipped off hand and held on wrist by a special wrist strap. Full information will be provided by the manufacturer:

Singer Glove Manufacturing Co., 860 W. Weed St., Chicago.

Item No. 20.

Safety Hook

A hook with a safety gate which locks automatically and will not open unless the pin is manually depressed is one of the safety features of the new Bullard-Burnham safety hook. The design of the safety gate



uses the hook shank as its operating base yet does not obstruct the throat of the hook. The rust proof gate which can be adapted to fit all makes and sizes of standard hooks opens and closes with ease in all types of weather. It swings open horizontally on the shank axle so that even a full hook load will not snap in loading or unloading operations.

A catalog and data sheets listing information concerning these new hooks are available upon request to:

E. D. Bullard Co., 275 Eighth St., San Francisco.

Item No. 21.

Drum Handling

A newly-designed all-steel rack for ease and safety in handling heavy drums has been developed so that one man can handle even a 750 lb. drum without strain or risk

New safety equipment for industry

Further information on these new products and equipment may be obtained by writing direct to the manufacturer or to National Safety News. Accompanying coupon is for your convenience.



of injury. The rack is simple and easy to assemble; only a pair of pliers and a hammer are needed. Featuring a newly



designed method of attachment, this rack is merely stood alongside drum, the two drum hooks are hooked over the top chime of the drum and the drum tilted into position. It is not necessary to tip the drum to insert clips under the drum before tilting into position. The rack has a handy telescoping steel handle to give added leverage and stability in handling. Four all-steel rollers are available as optional equipment and facilitate moving of drums from place to place. Write the manufacturer for more details:

Baker-Ross, Inc., 602 W. McCarty St., Indianapolis, Ind.
Item No. 22.

Portable Lamps

Two new fluorescent portable inspection units with or without magnification present a cool light source designed primarily for



use wherever close viewing is necessary. These units offer intense, glare-free white light without objectionable heat.

Small in size yet large in ability, the two or four-power lens is straddled by twin fluorescent lamps for maximum seeing

ability and comfort. The new Lite-Mite units can be equipped instantly with ultra-violet radiation. Complete catalog is available on request:

Stocker & Yale, Inc., Marblehead, Mass.
Item No. 23.

Floor Treatment

Floor treatment products from the Hillyard Chemical Co. are now packaged in new lithographed drums. The new process which reproduces directly from a negative or metal, has many advantages over painting, stenciling or methods currently in general use. This lithographing process enables Hillyard to serve customers with floor treatment products in a sealed container of greater durability and versatility. All three of the openings, a $\frac{3}{4}$ " on side, a $\frac{3}{4}$ " and a 2" in head, have a special lithograph seal that protects the buyer. If



the seal is broken, the buyer knows the material has been tampered with. If the seal is not broken, Hillyard stands behind the quality sealed merchandise. Direction-labels on both the side of the container and on the head provide easy viewing when barrel is standing up or laying down on the rack. Openings for faucets in both the head and on the side of the new drums and half drums, make it more convenient for dispensing from a standing-up or horizontal position. Manufacturer will send complete details.

Hillyard Chemical Co., 402 N. Third St., St. Joseph, Mo.
Item No. 24.

Magnifying Lenses

Improved vision for welders who wear bifocal glasses is provided by a new device, Ortho-Weld magnifying lenses, developed by Bausch & Lomb Optical Co.

The lenses, precision-molded of lucite,

are made to fit all standard welding helmets. By inserting them between the regular helmet filter lens and the rear cover



plate of the lens holder, the bifocal-wearing welder is given comfortable close-up vision at any angle. Magnification provided by the lenses is needed because the bifocal segment of regular glasses is out of the line of vision while the helmet is in working position. For further details write:

Bausch & Lomb Optical Co., Rochester, N. Y.
Item No. 25.

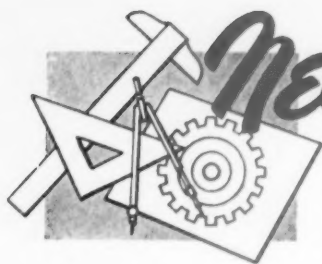
Gas Indicator

Sequential sampling of potentially explosive atmospheres from six separate locations is performed by the new Model RV-6 indicating type combustible gas alarm system. Model variations are available to permit sampling from any number of locations from two to eight.

In operation the unit draws samples continuously through metallic tubing and analyzes them point by point on a 30-second cycle. The detecting instrument is a platinum filament Wheatstone Bridge detection circuit. Indication of the presence of combustible gas is provided on a panel-mounted indicating instrument, while the sample line currently being analyzed is indicated by a series of pilot lights on the front panel.

The model is housed in a free-standing steel cabinet for complete enclosure. Measurements are 22" wide x 18" deep x 68" high. Operation is from 115 volts AC, 50-60 cycles. Manufacturer will send complete details upon request:

Johnson-Williams, Ltd., 2618 Third St., Palo Alto, Calif.
Item No. 26.



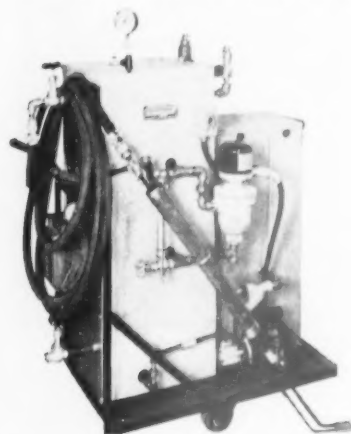
New safety equipment for industry

Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.

Steam-Jet Cleaning

For fast, indoors, steam-jet cleaning with safety from fire hazards or flooding of the working area is the new "Standard" Speedylectric Steam-Jet Cleaner with automatic balanced control.

Featuring compact portability, fast action, operating simplicity, safety and all



electric freedom from fire hazards, this new unit is available for operations on 220, 440, or 550 volts A.C. power. The operation of the steam generator, regulation of detergent flow and atomization with steam at the jet are all under fingertip control of the operator at the steam gun or lance. Write direct to manufacturer for full details:

Livingstone Engineering Co., 100 Grove St., Worcester, Mass.

Item No. 27.

News Items

Fred A. Small has been appointed regional sales manager in Southeastern

United States for Breuer Electric Manufacturing Co. Mr. Small has been engaged in distribution and sales of Tornado equipment in Detroit. In his new capacity he will direct the company's sales operations for their line of Tornado commercial and industrial floor machines, vacuum cleaners and portable electric blowers in Alabama, Florida, Georgia, North and South Carolina and Eastern Tennessee.

Russell J. Dickson has been appointed general sales manager, Leschen Wire Rope Division of H. K. Porter Co., Inc., St. Louis. Mr. Dickson will be in charge of



the company's sales activities. He has been with Leschen for more than three years as district sales manager. His entire business experience has been in the wire rope industry.

Forest Moor, president of the Gro-Cord Rubber Co., Lima, Ohio, announces the

acquisition by his company of the Alfred Hale Rubber Co. of North Quincy, Mass. The Alfred Hale Rubber Co., established in 1837, is one of the oldest manufacturers of high grade soling materials for the shoe manufacturing industry. This purchase brings to three the manufacturing units operated by the Gro-Cord Rubber Co.

Central Safety Equipment Co., 2200 E. Huntingdon St., Philadelphia, announces the appointment of Arthur W. Espey to handle the distribution of Rockwood portable equipment, nozzles, foam, wet and proportioners. Mr. Espey is well known in the fire fighting field, having been a member of the Municipal Fire Department of Philadelphia and an officer of that department as well as organizer of the State Fire School, for the State of Pennsylvania, some years ago.

Mathias Klein & Sons, established in 1857, pioneer Chicago manufacturer of tools and equipment for the electrical industry and hardware field, are readying for their big move to a new and modern location.

The new plant will be located in Skokie, Illinois, north of Chicago. The building contains 110,000 square feet and is one story permitting maximum efficiency in straight line production.

According to Mr. Mathias A. Klein, President, and grandson of the founder, the new factory is scheduled to be completed about June 1, 1954. The change of location is necessitated by construction of the Northwest Super Highway that will take the present property which Mathias Klein & Sons have occupied at 3200 Belmont Ave., Chicago, since 1912.

NATIONAL SAFETY NEWS

425 N. Michigan Ave., Chicago 11, Ill.

Please have complete information sent to me on items circled:

OCTOBER, 1953

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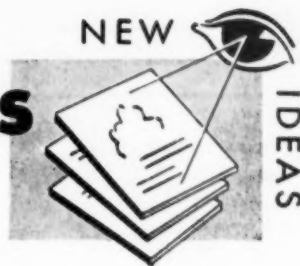
CITY _____ STATE _____

Trade publications

in the safety field

These trade publications will help you to keep up-to-the-minute on new products and developments in industrial health and safety equipment. They are free and will be sent by manufacturers without obligation to readers of NATIONAL SAFETY NEWS who are responsible for this work. Send in the coupon below checked for the publications you desire. Please make your requests promptly.

NEW



IDEAS

1. **Lifting Clamp:** Literature describes a powerful drop forged clamp for raising, lowering and conveying any flat surfaced metal in raw, finished or fabricated condition, or anything that has sufficient flat surface such as plates, drums, containers, angles and structural assemblies. Merrill Brothers.

2. **Accident Prevention Signs:** Pamphlet illustrates different types of standard stock-worded signs shown under the various industrial hazard headings, to warn, educate and impress workers with the importance of thinking and acting safely. Stonehouse Signs, Inc.

3. **Carbon Dioxide Extinguishing Systems:** 8-page, 2-color booklet describes the company's line of built-in carbon-dioxide extinguishing systems. It begins by explaining the value of carbon-dioxide as a fire control, continues by listing the uses, covers total and limited flooding of areas, explains the operation of the system and discusses the various types of automatic systems such as fixed temperature thermostats, rate-of-rise and fusible quartz bulbs. Walter Kidde & Co.

4. **"Every Factory and Public Building":** Folder fully describes Watchlock systems; each station contains a key which watchman inserts in key-hole of clock. Registration is made, in sequence, as to time and place throughout period of tour. Chicago Watchlock Division, Great Lakes Industries, Inc.

5. **"Slings to Lift Anything in the World":** Pamphlet covers company's line of slings and wire rope fittings. Illustrations and description explain each product. Specifications included. Lowery Brothers.

6. **"Ticks-Off":** Bulletin No. 0408-2 describes "Ticks-Off," an insect repellent bomb used to repel ticks, chiggers, mosquitoes, flies and other disease carriers. Provides protection for utility linemen, oil field workers, construction men, loggers, etc. Mine Safety Appliances Co.

7. **Forkloader:** New, two color literature

on the recently-introduced Baker-Lull Fork-loader. The literature describes applications on features of the 4-wheel-drive equipment and lists complete specifications for all models. Baker-Lull Corp.

8. **"Group Lamp Replacement Pays Off":** A case history report on how group lamp replacement pays off by providing better lighting at lower cost, in factories, offices, and stores. General Electric.

9. **"The Fork Truck of the Future":** Featured in the new 16-page magazine. Schematic sketches illustrate special details of the new stream-lined truck. A brief description of company's complete line of fork trucks described and shown. Clark Equipment Co.

10. **Electronic Fire Protection:** A folder discussing an electronic fire detection system that automatically sounds warning of temperature rise, locates and identifies the area of danger. Two-wire closed circuit permits economic installation and eliminates cumbersome wiring. Lord-Taber Co., Inc.

11. **Safety Shoes:** Catalog illustrates a complete line of steel toe safety shoes in styles including dress oxfords, blucher, oil resistant styles, work shoes with leather, cord, composition and vul-cork soles, molders, shoes, boots, hi-cuts and rubber footwear. Iron Age Div., H. Childs & Co., Inc.

12. **"Good Will Advertising":** Brochure emphasizing use of pens, pencil sets, flashlights, etc. carrying company name for good will distribution to promote sales. Frederick Hornik.

13. **"Life Line":** 55-page booklet made up as a fast moving picture-story illustrates the manufacture of Macwhyte wire rope. Macwhyte Co.

14. **Wet or Dry Vacuum Machines:** Folder describes and illustrates heavy-duty portable wet or dry vacuum machines. A new feature in Models 155 and 115 is the "Bi-Pass" motor which requires no change of filter and cannot be damaged by dust or moisture. Hild Floor Machine Co.

15. **"Safety Retractable Wheel Chock":** Literature describes the retractable wheel chock which will hold trucks or trailers safely in position—preventing accidental movement of vehicles when loading or during maintenance work. Calumet Steel Castings Corp.

16. **"How to Make Your Own Slide Film Presentation for Under \$20.00":** A new how-to-do-it booklet for business firms tells how tape recordings and color slides can be combined to tell a story or convey an idea in an interesting and effective manner at low cost. Minnesota Mining & Mfg. Co.

17. **"Crosby Wire Rope Clips":** Catalog 900-69 features company's line of wire rope clips. Charts included. American Hoist & Derrick Co.

18. **"Precision Snap-Action Switches":** Pamphlet illustrates switches for all industrial switching requirements. Shown are: high capacity switches, general purpose limit switches, explosion-proof switches, heavy duty limit and die cast enclosed switches. Micro Switch.

19. **"The Key to Protection":** A booklet on a power press guard, showing how it reduces accidents and creates gains in press production. The guard is practical, yet flexible in design to be adaptable to a variety of presses. Junkin Safety Application Co.

20. **Lens Cleaning Station:** A folder on a lens cleaning dispenser cabinet that is neat, compact, containing lens cleaner, tissue and space for used tissue. Easy to install, use and service, it is made of all-welded steel construction, in white or green baked enamel finish. The Wilkins Co.

21. **Eye Wash Fountains:** Descriptive pamphlet regarding equipment designed to save the sight of workers. Designed to deliver a twin stream of clean water into the eyes of workers who get chemicals or foreign objects into eyes, and reduce lost-time accidents. Benson & Associates, Inc.

NATIONAL SAFETY NEWS

425 N. MICHIGAN AVE., CHICAGO 11, ILLINOIS

OCTOBER, 1953

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CESCO FOR SAFETY

Now . . . 2 New

AO COVERGLAS GOGGLES

Fit Over Safety
And Personal Glasses



#326

NEW - 4 WAYS!

1. New Cup Size and Shape
2. New Lens Size and Shape
3. New Side Shields
4. New Easy Lens Replacement



#327

AO's newest development in eye protection—Chippers' and Welders' Coverglas Goggles—can be worn over practically every pair of personal glasses (even the biggest frames) and most types of safety prescription goggles *with and without side shield*.

Wider vision, too, because the lenses are larger and scientifically designed to give up to 20% more vision. Yet, with all these features the goggles weigh but a fraction of an ounce more than ordinary Coverglas goggles . . . cost only slightly more.

These goggles are the newest . . . and two of the greatest . . . developments since the advent of safety goggles. Get all the facts about these two outstanding Coverglas goggles from your AO Safety Products Representative. He can supply you.

QUICK FACTS

- Lens easily replaceable from rear (not front) by means of a spring clamp—no tools needed
 - Lightweight, brown plastic cups fit face snugly, won't conduct heat or electricity
 - Light-tight side shields for welders (on No. 327 goggle) provide indirect ventilation
 - Bridge—High-grade leather. Instant adjustment
 - AO worker-lab tests show much greater field of vision and increased comfort
 - All-rubber headband, easily adjustable
- "326" Chippers' Coverglas goggle supplied with regular Super Armorplate lenses; "327" Welders' Coverglas goggle supplied with regular Noviweld lenses and cover lenses.

AO's Industrial Vision Program Increases Production, Decreases Accidents. Write today for booklet "Improved Industrial Vision" to 1011 Vision Park, Southbridge, Mass.



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